

FIG. 1

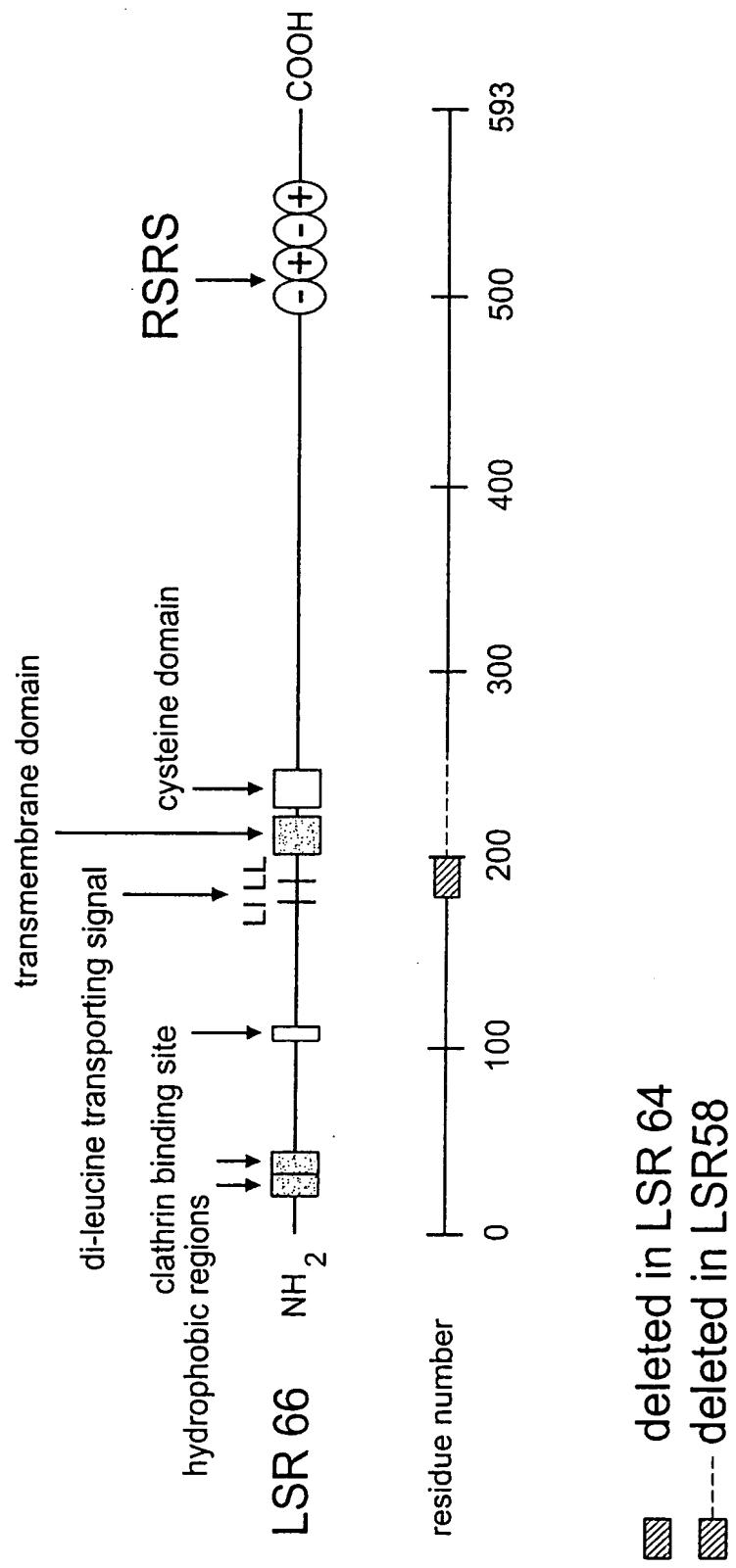


FIG. 2A

LSR1.Hs (SEQ ID NO:8)
LSR2.Hs (SEQ ID NO:10)
LSR3.Hs (SEQ ID NO:12)

MQQDGLGVGTRNGSGKGRSVHPSWPWCAPRPLRYFGRDARARRAQTAAMALLAGGLSRGL
MQQDGLGVGTRNGSGKGRSVHPSWPWCAPRPLRYFGRDARARRAQTAAMALLAGGLSRGL
MQQDGLGVGTRNGSGKGRSVHPSWPWCAPRPLRYFGRDARARRAQTAAMALLAGGLSRGL

LSR1.Hs (SEQ ID NO:8)
LSR2.Hs (SEQ ID NO:10)
LSR3.Hs (SEQ ID NO:12)

GSHPAAAGRDAVVFW~~WLLLSTWCTAPARAIQVT~~SNPYHVVILFQPVTLPC~~TYQM~~TPT
GSHPAAAGRDAVVFW~~WLLLSTWCTAPARAIQVT~~SNPYHVVILFQPVTLPC~~TYQM~~TPT
GSHPAAAGRDAVVFW~~WLLLSTWCTAPARAIQVT~~SNPYHVVILFQPVTLPC~~TYQM~~TPT

LSR1.Hs (SEQ ID NO:8)
LSR2.Hs (SEQ ID NO:10)
LSR3.Hs (SEQ ID NO:12)

QPIIVWKYKSFCRDRIADAFSPASVDNQLNAQLAAGNPGMNPYVECQDSVRTVRVVATKQ
QPIIVWKYKSFCRDRIADAFSPASVDNQLNAQLAAGNPGMNPYVECQDSVRTVRVVATKQ
QPIIVWKYKSFCRDRIADAFSPASVDNQLNAQLAAGNPGMNPYVECQDSVRTVRVVATKQ

LSR1.Hs (SEQ ID NO:8)
LSR2.Hs (SEQ ID NO:10)
LSR3.Hs (SEQ ID NO:12)

GNAVTLGDYYQGRITITGNADLTFDQTAWGDSGVYYCSVVSAQDLQGNNEAYAELIVLG
GNAVTLGDYYQGRITITGNADLTFDQTAWGDSGVYYCSVVSAQDLQGNNEAYAELIVL-
GNAVTLGDYYQGRITITGNADLTFDQTAWGDSGVYYCSVVSAQDLQGNNEAYAELIVL-

LSR1.Hs (SEQ ID NO:8)
LSR2.Hs (SEQ ID NO:10)
LSR3.Hs (SEQ ID NO:12)

RTSGVAEHLPGFQAGPIEDDWLFVVVVCLAAFLIFLLGICWCQCCPHTCCCYVRCPCCPD
-----DWLFVVVVCLAAFLIFLLGICWCQCCPHTCCCYVRCPCCPD

LSR1.Hs (SEQ ID NO:8)
LSR2.Hs (SEQ ID NO:10)
LSR3.Hs (SEQ ID NO:12)

▼ KCCCPEALYAAGKAATSGVPSIYAPSTYAHLSPAKTPPPPAMIPMGPAYNGYPGGYPGDV
KCCCPEALYAAGKAATSGVPSIYAPSTYAHLSPAKTPPPPAMIPMGPAYNGYPGGYPGDV
-----VYAAGKAATSGVPSIYAPSTYAHLSPAKTPPPPAMIPMGPAYNGYPGGYPGDV

LSR1.Hs (SEQ ID NO:8)
LSR2.Hs (SEQ ID NO:10)
LSR3.Hs (SEQ ID NO:12)

DRSSSAGGQGSYVPLLRDTDSSVASEVRSGYRIQASQQDDSMRVLYYMEKELANFDPSRP
DRSSSAGGQGSYVPLLRDTDSSVASEVRSGYRIQASQQDDSMRVLYYMEKELANFDPSRP
DRSSSAGGQGSYVPLLRDTDSSVASEVRSGYRIQASQQDDSMRVLYYMEKELANFDPSRP

LSR1.Hs (SEQ ID NO:8)
LSR2.Hs (SEQ ID NO:10)
LSR3.Hs (SEQ ID NO:12)

GPPSGRVERAMSEVTS LHEDDWRSRPSRGPA LTP IRDEEWGHS PRS PRGWDQE PAREQA
GPPSGRVERAMSEVTS LHEDDWRSRPSRGPA LTP IRDEEWGHS PRS PRGWDQE PAREQA
GPPSGRVERAMSEVTS LHEDDWRSRPSRGPA LTP IRDEEWGHS PRS PRGWDQE PAREQA

LSR1.Hs (SEQ ID NO:8)
LSR2.Hs (SEQ ID NO:10)
LSR3.Hs (SEQ ID NO:12)

GGGWRARRPRARSVDALDDLTTPSTAEGSRSPSTSNGGRSRAYMPPRSRSRDDLYDQDDDS
GGGWRARRPRARSVDALDDLTTPSTAEGSRSPSTSNGGRSRAYMPPRSRSRDDLYDQDDDS
GGGWRARRPRARSVDALDDLTTPSTAEGSRSPSTSNGGRSRAYMPPRSRSRDDLYDQDDDS

FIG. 3A

LSR1.Hs (SEQ ID NO:8)
LSR2.Hs (SEQ ID NO:10)
LSR3.Hs (SEQ ID NO:12)

RDFPRSRDPHYDDFRSRERPPADPRSHHHRTRDPRDNGSRSGDLPYDGRLEAVRKKG
RDFPRSRDPHYDDFRSRERPPADPRSHHHRTRDPRDNGSRSGDLPYDGRLEAVRKKG
RDFPRSRDPHYDDFRSRERPPADPRSHHHRTRDPRDNGSRSGDLPYDGRLEAVRKKG

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LSR1.Hs (SEQ ID NO:8)
LSR2.Hs (SEQ ID NO:10)
LSR3.Hs (SEQ ID NO:12)

BERRRPHKEEEEEEAYYPPAPPPYSETDSQASRERRLKKNLALSRESLV
BERRRPHKEEEEEEAYYPPAPPPYSETDSQASRERRLKKNLALSRESLV
BERRRPHKEEEEEEAYYPPAPPPYSETDSQASRERRLKKNLALSRESLV

FIG. 3B

FFA

LSR1 .Rn (SEQ ID NO:2)

LSR2 .Rn (SEQ ID NO:4)

LSR3 .Rn (SEQ ID NO:6)

MAPAAGACAGAPDSHPATVVF [CLFLIIFCPDPASAIQVT] SDPYHVVILFQPVTLPC
 MAPAAGACAGAPDSHPATVVF [CLFLIIFCPDPASAIQVT] SDPYHVVILFQPVTLPC
 MAPAAGACAGAPDSHPATVVF [CLFLIIFCPDPASAIQVT] SDPYHVVILFQPVTLPC

LSR1 .Rn (SEQ ID NO:2)

LSR2 .Rn (SEQ ID NO:4)

LSR3 .Rn (SEQ ID NO:6)

QMSNTLTVPIVIWKYKSFCDRIADAFSPASVDNQLNAQLAAG[NPC]NPYVECQDSVRTV
 QMSNTLTVPIVIWKYKSFCDRIADAFSPASVDNQLNAQLAAG[NPC]NPYVECQDSVRTV
 QMSNTLTVPIVIWKYKSFCDRIADAFSPASVDNQLNAQLAAG[NPC]NPYVECQDSVRTV

LSR1 .Rn (SEQ ID NO:2)

LSR2 .Rn (SEQ ID NO:4)

LSR3 .Rn (SEQ ID NO:6)

RVVATKQGNAVTLDYYQGRRITITGNADLTFEQTAWGDSGVYYCSVVSAQDLDGNNEAY
 RVVATKQGNAVTLDYYQGRRITITGNADLTFEQTAWGDSGVYYCSVVSAQDLDGNNEAY
 RVVATKQGNAVTLDYYQGRRITITGNADLTFEQTAWGDSGVYYCSVVSAQDLDGNNEAY

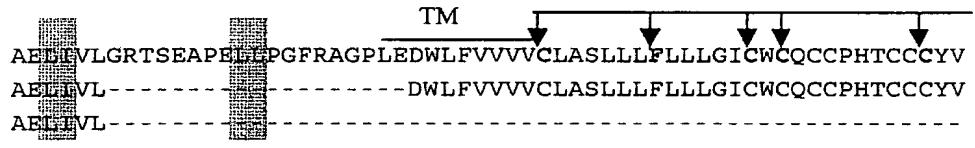
LSR1 .Rn (SEQ ID NO:2)

LSR2 .Rn (SEQ ID NO:4)

LSR3 .Rn (SEQ ID NO:6)

AET[RE]VLRGRTSEAPE[RE]PGFRAGPLEDWLFVVVCLASLLLFLGGICWCQCCPHTCCYV
 AET[RE]VLR-----DWLFVVVCLASLLLFLGGICWCQCCPHTCCYV
 AET[RE]VLR-----

TM



RCPCCPDKCCCPEALYAAGKAATSGVPSIYAPSIYTHLSPAKTPPPPPAMIPMGPPYGYP
 RCPCCPDKCCCPEALYAAGKAATSGVPSIYAPSIYTHLSPAKTPPPPPAMIPMGPPYGYP
 -----VYAAGKAATSGVPSIYAPSIYTHLSPAKTPPPPPAMIPMGPPYGYP

LSR1 .Rn (SEQ ID NO:2)

LSR2 .Rn (SEQ ID NO:4)

LSR3 .Rn (SEQ ID NO:6)

GDFDRHSSVGGHSSQVPLRDVDGSVSSEVRSGYRIQANQQDDSMRVLYYMEKELANFDP
 GDFDRHSSVGGHSSQVPLRDVDGSVSSEVRSGYRIQANQQDDSMRVLYYMEKELANFDP
 GDFDRHSSVGGHSSQVPLRDVDGSVSSEVRSGYRIQANQQDDSMRVLYYMEKELANFDP

LSR1 .Rn (SEQ ID NO:2)

LSR2 .Rn (SEQ ID NO:4)

LSR3 .Rn (SEQ ID NO:6)

SRPGPPNGRVERAMSEVTSLHEDDWRSRSPRAPALTPIRDEENRHS PQS PRTWEQEPLQ
 SRPGPPNGRVERAMSEVTSLHEDDWRSRSPRAPALTPIRDEENRHS PQS PRTWEQEPLQ
 SRPGPPNGRVERAMSEVTSLHEDDWRSRSPRAPALTPIRDEENRHS PQS PRTWEQEPLQ

LSR1 .Rn (SEQ ID NO:2)

LSR2 .Rn (SEQ ID NO:4)

LSR3 .Rn (SEQ ID NO:6)

EQPRGGWGSGRPRARSVDALDDINRPGSTESGRSSPPSSGRRGRAYAPP[RS]SRDDLYDP
 EQPRGGWGSGRPRARSVDALDDINRPGSTESGRSSPPSSGRRGRAYAPP[RS]SRDDLYDP
 EQPRGGWGSGRPRARSVDALDDINRPGSTESGRSSPPSSGRRGRAYAPP[RS]SRDDLYDP

LSR1 .Rn (SEQ ID NO:2)

LSR2 .Rn (SEQ ID NO:4)

LSR3 .Rn (SEQ ID NO:6)

DDPRDLPHSRDPHYDDIRSRDPRADPRSRQSRDPRDAGFRSRDPQYDGRLL EALKKK
 DDPRDLPHSRDPHYDDIRSRDPRADPRSRQSRDPRDAGFRSRDPQYDGRLL EALKKK
 DDPRDLPHSRDPHYDDIRSRDPRADPRSRQSRDPRDAGFRSRDPQYDGRLL EALKKK

FIG. 4A

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LSR1.Rn (SEQ ID NO:2)

LSR2.Rn (SEQ ID NO:4)

LSR3.Rn (SEQ ID NO:6)

GSGERRRVYREEEEEEEH GQYPPAPPPYSETDSQASRERRLKKNLALSRESLVV
GSGERRRVYREEEEEEEH GQYPPAPPPYSETDSQASRERRLKKNLALSRESLVV
GSGERRRVYREEEEEEEH GQYPPAPPPYSETDSQASRERRLKKNLALSRESLVV

FIG. 4B

FFA

LSR1.Mm (SEQ ID NO:16)

LSR2.Mm (SEQ ID NO:17)

LSR1.Mm (SEQ ID NO:18)

MAPAAASACAGAPGSHPATTIFCLFLIIYCPDRASAIQVTVPDPYHVVILFQPVTLHCTY

MAPAAASACAGAPGSHPATTIFCLFLIIYCPDRASAIQVTVPDPYHVVILFQPVTLHCTY

MAPAAASACAGAPGSHPATTIFCLFLIIYCPDRASAIQVTVPDPYHVVILFQPVTLHCTY

LSR1.Mm (SEQ ID NO:16)

LSR2.Mm (SEQ ID NO:17)

LSR3.Mm (SEQ ID NO:18)

QMSNTLTAPIVIWKYKSFCDRVAADFSPASVDNQLNAQLAAGNPGYNPYVECQDSVRTV

QMSNTLTAPIVIWKYKSFCDRVAADFSPASVDNQLNAQLAAGNPGYNPYVECQDSVRTV

QMSNTLTAPIVIWKYKSFCDRVAADFSPASVDNQLNAQLAAGNPGYNPYVECQDSVRTV

LSR1.Mm (SEQ ID NO:16)

LSR2.Mm (SEQ ID NO:17)

LSR2.Mm (SEQ ID NO:18)

RVVATKQGNAVTLDYYQGRRITITGNAGLTFEQTAWGDSGVYYCSVVSQDLDGNNEAY

RVVATKQGNAVTLDYYQGRRITITGNAGLTFEQTAWGDSGVYYCSVVSQDLDGNNEAY

RVVATKQGNAVTLDYYQGRRITITGNAGLTFEQTAWGDSGVYYCSVVSQDLDGNNEAY

LSR1.Mm (SEQ ID NO:16)

LSR2.Mm (SEQ ID NO:17)

LSR3.Mm (SEQ ID NO:18)

AETIVLGLRTSEAPHEPGFRAFPLEDWLFWVVVCLASLLFLLLGIWCQCCPHTCCCYV

AETIVL-----DWLFVVVVCLASLLFLLLGIWCQCCPHTCCCYV

AETIVL-----

TM

RCPCCPDKCCCPEALYAAGKAATSGVPSIYAPSIYTHLSPAKTPPPPAMIPMRPPYGY

RCPCCPDKCCCPEALYAAGKAATSGVPSIYAPSIYTHLSPAKTPPPPAMIPMRPPYGY

-----VYAGKAATSGVPSIYAPSIYTHLSPAKTPPPPAMIPMRPPYGY

LSR1.Mm (SEQ ID NO:16)

LSR2.Mm (SEQ ID NO:17)

LSR3.Mm (SEQ ID NO:18)

GDFDRTSSVGGHSSQVPLLREVDGSVSSEVRSGYRIQANQQDDSMRVLYYMEKELANFDP

GDFDRTSSVGGHSSQVPLLREVDGSVSSEVRSGYRIQANQQDDSMRVLYYMEKELANFDP

GDFDRTSSVGGHSSQVPLLREVDGSVSSEVRSGYRIQANQQDDSMRVLYYMEKELANFDP

LSR1.Mm (SEQ ID NO:16)

LSR2.Mm (SEQ ID NO:17)

LSR3.Mm (SEQ ID NO:18)

SRPGPPNGRVERAMSEVTSLHEDDWRSRSPRAPALTPIRDEENRHSRSPSRTWEQEPLQ

SRPGPPNGRVERAMSEVTSLHEDDWRSRSPRAPALTPIRDEENRHSRSPSRTWEQEPLQ

SRPGPPNGRVERAMSEVTSLHEDDWRSRSPRAPALTPIRDEENRHSRSPSRTWEQEPLQ

LSR1.Mm (SEQ ID NO:16)

LSR2.Mm (SEQ ID NO:17)

LSR3.Mm (SEQ ID NO:18)

EQPRGGWGSGRPRARSVDALDDINPGSTESGRSSPPSSGRRGRAYAPERSRSRDDLYDP

EQPRGGWGSGRPRARSVDALDDINPGSTESGRSSPPSSGRRGRAYAPERSRSRDDLYDP

EQPRGGWGSGRPRARSVDALDDINPGSTESGRSSPPSSGRRGRAYAPERSRSRDDLYDP

LSR1.Mm (SEQ ID NO:16)

LSR2.Mm (SEQ ID NO:17)

LSR3.Mm (SEQ ID NO:18)

DDPRDLPHSRDPHYDDLRSRDPADPRSRQRSHDPRDAGFRSRDPQYDGRLEALKKK

DDPRDLPHSRDPHYDDLRSRDPADPRSRQRSHDPRDAGFRSRDPQYDGRLEALKKK

DDPRDLPHSRDPHYDDLRSRDPADPRSRQRSHDPRDAGFRSRDPQYDGRLEALKKK

FIG. 5A

+--

LSR1.Mm (SEQ ID NO:16) GAGERRRVYREEEEEEEGHYPPAPPPYSETDSQASRERRMKKNLALSRESLVV
LSR2.Mm (SEQ ID NO:17) GAGERRRVYREEEEEEEGHYPPAPPPYSETDSQASRERRMKKNLALSRESLVV
LSR3.Mm (SEQ ID NO:18) GAGERRRVYREEEEEEEGHYPPAPPPYSETDSQASRERRMKKNLALSRESLVV

FIG. 5B

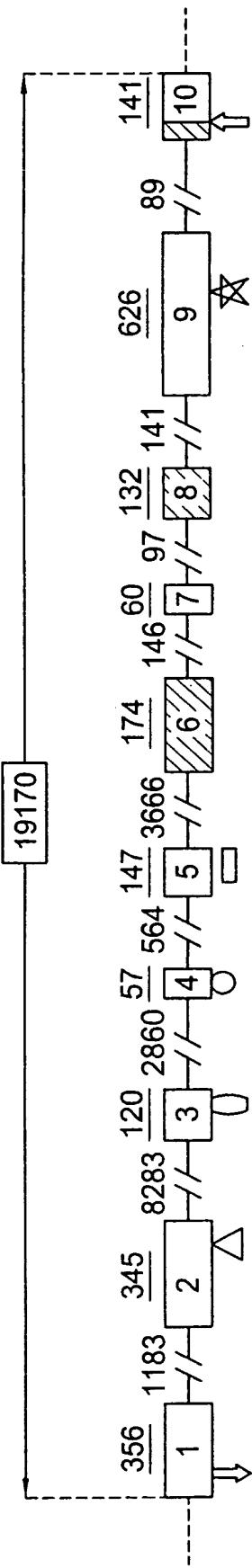
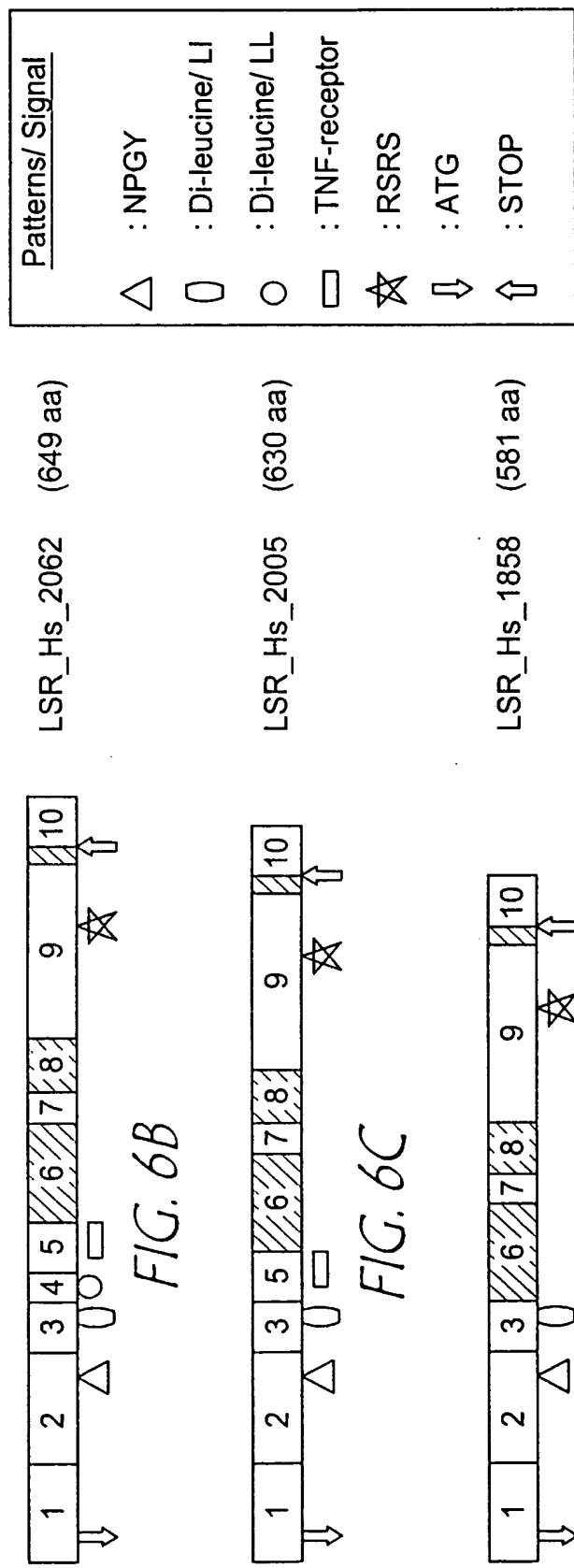


FIG. 6A



| | |
|-------------------------------|---|
| <u>1sr1.Hs</u> (SEQ ID NO:7) | TGGAGTGTGGCTGGAGGACCGCGGGTCAAGCACCTTCTCCCCCATATCTGAAAGC |
| <u>1sr1.Rn</u> (SEQ ID NO:1) | -----ACCGCTACCAAGTCAGTTGTCCCCGGAAAGCCGAAGGC |
| <u>1sr1.Mm</u> (SEQ ID NO:13) | ----- |
| | |
| <u>1sr1.Hs</u> (SEQ ID NO:7) | ATGCCCTTGTCACGTCGTTACGCTCATTAAGCTTACCGAGGACGGAA |
| <u>1sr1.Rn</u> (SEQ ID NO:1) | ATGAGCTCGCCAAGTTCTTTATGGGTTAGAACTCCTCCAGAGCGGGGGAAAAAGGA |
| <u>1sr1.Mm</u> (SEQ ID NO:13) | ----- |
| | |
| <u>1sr1.Hs</u> (SEQ ID NO:7) | CTTGGAGTAGGGACAAGGAACGGAAGTGGGAAGGGGAGGAGCGTGCACCCCTCCTGGCCT |
| <u>1sr1.Rn</u> (SEQ ID NO:1) | CTTGGAAATAGGGC-----GGGACGGAGCACGCACCCCTCTCCGCCT |
| <u>1sr1.Mm</u> (SEQ ID NO:13) | ----- |
| | |
| <u>1sr1.Hs</u> (SEQ ID NO:7) | TGGTGCGCGCCGCGCCCCCTA-----AGGTACTTTGAAGGGACGCGCGGGC-CAGACG |
| <u>1sr1.Rn</u> (SEQ ID NO:1) | TGGTTCTCGCCGCGCCCCCTACTCTCGGATACTTGGGAGGGGACGCGCGGGCACCCTCG |
| <u>1sr1.Mm</u> (SEQ ID NO:13) | -----GCACCGTGC |
| | ***** |
| | |
| <u>1sr1.Hs</u> (SEQ ID NO:7) | CGCCCCAGACGGCCGCGATGGCCTGTTGGCGGGCGGCTCTCCAGAGGGCTGGCTCCCC |
| <u>1sr1.Rn</u> (SEQ ID NO:1) | CTGCTAGACGGCCGCGATGGCCTGGCGCGCTGTGTCTGGGGCGCCTGACTCCCC |
| <u>1sr1.Mm</u> (SEQ ID NO:13) | CTGCTAGACGGCCGCGATGGCCTGGCGCGCTGTGTCTGGGGCGCCTGGCTCCCC |
| | ***** |
| | |
| <u>1sr1.Hs</u> (SEQ ID NO:7) | CCCGGCCGCCGCAGGCCGGACGCCGGTCGTCTCGTGTGGCTCTGCTTAGCACCTGGTG |
| <u>1sr1.Rn</u> (SEQ ID NO:1) | CCCAGCTACCGTGG-----TCTTCGTGTCTCTTCATCATTTCTG |
| <u>1sr1.Mm</u> (SEQ ID NO:13) | CCCAGGCCACCACGA-----TCTTCGTGTCTCTTCATCATTTACTG |
| | ***** |
| | |
| <u>1sr1.Hs</u> (SEQ ID NO:7) | CACAGCTCCTGCCAGGCCATCCAGGTGACCGTGTCCAACCCCTACCACGTGGTGATCCT |
| <u>1sr1.Rn</u> (SEQ ID NO:1) | CCCAGACCCCTGCCAGTGCATCCAGGTGACTGTGTCTGACCCCTACCACGTAGTGATCCT |
| <u>1sr1.Mm</u> (SEQ ID NO:13) | CCCAGACCGTGCAGTGCATCCAGGTGACCGTGCCTGACCCCTACCACGTAGTGATCCT |
| | ***** |
| | |
| <u>1sr1.Hs</u> (SEQ ID NO:7) | CTTCCAGCCTGTGACCCCTGCCCTGTACCTACCAGATGACCTCGACCCCCACGCAACCCAT |
| <u>1sr1.Rn</u> (SEQ ID NO:1) | GTTCCAGCCAGTGACCCCTGCCCTGCACCTATCAGATGAGCAACACTCTCACAGCCCCAT |
| <u>1sr1.Mm</u> (SEQ ID NO:13) | GTTCCAGCCAGTGACACTACACTGCACCTACCAGATGAGCAATACCCCTCACAGCCCCAT |
| | ***** |
| | |
| <u>1sr1.Hs</u> (SEQ ID NO:7) | CGTCATCTGGAAGTACAAGTCTTCTGCCGGACCCGATGCCGATGCCCTCTCCCCGGC |
| <u>1sr1.Rn</u> (SEQ ID NO:1) | CGTGATCTGGAAGTACAAGTCATTCTGCCGGACCGTATTGCCGATGCCCTCTCCTGC |
| <u>1sr1.Mm</u> (SEQ ID NO:13) | CGTGATCTGGAAGTATAAGTCGTTCTGTCGGGACCGTGTGCCGACGCCCTCTCCCCCTGC |
| | ***** |

| | |
|-------------------------------|---|
| <u>lsr1.Hs</u> (SEQ ID NO:7) | CAGCGTCGACAACCAGCTCAATGCCAGCTGGCAGCCGGAACCCAGGCTACAACCCCTA |
| <u>lsr1.Rn</u> (SEQ ID NO:1) | CAGTGTGGACAACCAGCTAAATGCCAGTGGCAGCTGGCAACCCGGCTACAACCCCTA |
| <u>lsr1.Mm</u> (SEQ ID NO:13) | CAGCGTGGACAACCAGCTCAACGCCAGCTGGCGCTGGCAACCCGGCTACAACCCCTA ***** |
| <u>lsr1.Hs</u> (SEQ ID NO:7) | CGTTGAGTGCCAGGACAGCGTGGCACCGTCAGGGTCTGGCCACCAAGCAGGGCAACCC |
| <u>lsr1.Rn</u> (SEQ ID NO:1) | TGTGGAGTGCCAGGACAGTGTACGCAGTGTACGGTGGCCACCAAACAGGGCAATGC |
| <u>lsr1.Mm</u> (SEQ ID NO:13) | TGTGGAGTGCCAGGACAGCGTACGCAGTGTACGGTGGCCACCAAACAGGGCAATGC ***** |
| <u>lsr1.Hs</u> (SEQ ID NO:7) | TGTGACCCCTGGGAGATTACTACCAGGGCCGGAGGATTACCATCACCGAAATGCTGACCT |
| <u>lsr1.Rn</u> (SEQ ID NO:1) | GGTGACCCCTGGGAGACTACTACCAAGGCAGGAGGATCACCATAACAGGAAATGCTGACCT |
| <u>lsr1.Mm</u> (SEQ ID NO:13) | TGTGACCCCTGGGAGACTACTACCAAGGGCAGGAGAATCACCATCACAGGAAATGCTGGCCT ***** |
| <u>lsr1.Hs</u> (SEQ ID NO:7) | GACCTTGACCAGACGGCGTGGGGGACAGTGGTGTATTACTGCTCGTGGTCTCAGC |
| <u>lsr1.Rn</u> (SEQ ID NO:1) | GACCTTCGAGCAGACAGCCTGGGAGACAGTGGAGTGTATTACTGCTCTGGTCTCGGC |
| <u>lsr1.Mm</u> (SEQ ID NO:13) | GACCTTCGAGCAGACGGCCTGGGAGACAGTGGAGTGTATTACTGCTCCGTGGTCTCAGC ***** |
| <u>lsr1.Hs</u> (SEQ ID NO:7) | CCAGGACCTCCAGGGGAACAATGAGGCCTACGCAGAGCTACGTCTTGGGAGGACCTC |
| <u>lsr1.Rn</u> (SEQ ID NO:1) | CCAAGATCTGGATGGAAACAACAGAGGCCTACGCAGAGCTACGTCTTGGCAGGACCTC |
| <u>lsr1.Mm</u> (SEQ ID NO:13) | CCAAGATCTGGATGGAAACAACAGAGGCCTACGCAGAGCTACGTCTTGGCAGGACCTC ***** |
| <u>lsr1.Hs</u> (SEQ ID NO:7) | AGGGGTGGCTGAGCTTACCTGGTTTCAGGCGGGGCCATAGAAGACTGGCTTTCG |
| <u>lsr1.Rn</u> (SEQ ID NO:1) | AGAGGCCCTGAGCTCCTACCTGGTTTCGGCGGGGCCCTGGAAAGATTGGCTTTGT |
| <u>lsr1.Mm</u> (SEQ ID NO:13) | AGAAGGCCCTGAGCTCCTACCTGGTTTCGGCGGGGCCCTGGAAAGATTGGCTTTGT ***** |
| <u>lsr1.Hs</u> (SEQ ID NO:7) | GGTTGTGGTATGCCTGGCTGCCTCCTCATCTTCCCTCCCTGGGCATCTGCTGGTGCCA |
| <u>lsr1.Rn</u> (SEQ ID NO:1) | GGTCGTGGTCTGCCTGGCGAGCCTCCTCCTGGGCATCTGCTGGTGCCA |
| <u>lsr1.Mm</u> (SEQ ID NO:13) | GGTCGTGGTCTGCCTGGCAAGCCTCCTCTTCCCTGGGCATCTGCTGGTGCCA ***** |
| <u>lsr1.Hs</u> (SEQ ID NO:7) | GTGCTGCCCGCACACTGCTGCTGCTACGTCAAGGTGCCCTGCTGCCAGACAAGTGTG |
| <u>lsr1.Rn</u> (SEQ ID NO:1) | GTGCTGTCCCTCACACCTGCTGCTGCTATGTCGATGTCCTGCTGCCAGACAAGTGTG |
| <u>lsr1.Mm</u> (SEQ ID NO:13) | GTGCTGTCCCCACACCTGCTGCTGCTATGTCAGATGTCCTGCTGCCAGACAAGTGTG ***** |
| <u>lsr1.Hs</u> (SEQ ID NO:7) | CTGCCCCGAGGCCCTGTATGCCCGGGCAAAGCAGCCACCTCAGGTGTTCCAGCATT |
| <u>lsr1.Rn</u> (SEQ ID NO:1) | TTGCCCTGAGGCTTTATGCTGCTGGCAAAGCAGCCACCTCAGGTGTCCCAGGCATCTA |
| <u>lsr1.Mm</u> (SEQ ID NO:13) | TTGCCCTGAGGCCCTTATGCTGCTGGCAAAGCAGCCACCTCAGGTGTGCCAGCATT ***** |

lsr1.Hs (SEQ ID NO:7) TGCCCCCAGCACCTATGCCACCTGTCTCCGCCAAGACCCACC---CCCACCACTAT
 lsr1.Rn (SEQ ID NO:1) TGCCCCCAGCATCTATAACCCACCTCTCACCTGCCAAGACCCACCACCTCCGCTGCCAT
 lsr1.Mm (SEQ ID NO:13) TGCCCCCAGCATCTATAACCCACCTCTCACCTGCCAAGACTCCGCCACCTCCGCTGCCAT

 lsr1.Hs (SEQ ID NO:7) GATTCCCATGGGCCCTGCCTACAACGGTACCCCTGGAGGATACCCCTGGAGACGTTGACAG
 lsr1.Rn (SEQ ID NO:1) GATTCCCATGGGCCCTCCCTAT-----GGTACCCCTGGAGACTTGACAG
 lsr1.Mm (SEQ ID NO:13) GATTCCCATGCGTCTCCCTAT-----GGTACCCCTGGAGACTTGACAG

 lsr1.Hs (SEQ ID NO:7) GAGTAGCTCAGCTGGGCCAAGGCTCTATGTACCCCTGCTCGGGACACGGACAGCAG
 lsr1.Rn (SEQ ID NO:1) ACATAGCTCAGTTGGGCCACAGCTCCAAGTACCCCTGCTGCGTGACGTGGATGGCAG
 lsr1.Mm (SEQ ID NO:13) GACCAGCTCAGTTGGGCCACAGCTCCAAGGTGCCCTGCTGCGTGAAAGTGGATGGGAG

 lsr1.Hs (SEQ ID NO:7) TGTGGCCTCTGAAGTCCGCAGTGGTACAGGATTCAAGGCCAGGCCAGCAGGACACTCCAT
 lsr1.Rn (SEQ ID NO:1) TGTATCTTCAGAAGTACGAAGTGGTACAGGATCCAGGCTAACCGCAAGATGACTCCAT
 lsr1.Mm (SEQ ID NO:13) CGTATCTTCAGAAGTACGAAGTGGTACAGGATCCAGGCTAACCGCAAGATGACTCCAT

 lsr1.Hs (SEQ ID NO:7) GCGGGTCCTGTACTACATGGAGAAGGAGCTGGCCAACCTCGACCCCTCTGACCTGGCC
 lsr1.Rn (SEQ ID NO:1) GAGGGTCCTATACTATATGGAGAAAGAGCTAGCCAACCTTGACCCCTCCGACCTGGCC
 lsr1.Mm (SEQ ID NO:13) GAGGGTCCTATACTATATGGAGAAGGAGCTAGCCAACCTCGATCCCTCCGGCCCTGGCC
 *
 lsr1.Hs (SEQ ID NO:7) CCCCAGTGGCCGTGGAGCGGCCATGAGTGAAGTCACCTCCCTCACGAGGACGACTG
 lsr1.Rn (SEQ ID NO:1) TCCCAATGGCAGAGTGGAACCGGCCATGAGTGAAGTAACCTCCCTCATGAAGATGACTG
 lsr1.Mm (SEQ ID NO:13) TCCCAATGGCAGTGGAACCGGCCATGAGTGAAGTAACCTCCCTCATGAAGATGACTG

 lsr1.Hs (SEQ ID NO:7) GCGATCTGGCCTTCCGGGGCCCTGCCCTCACCCGATCCGGATGAGGACTGGGTGG
 lsr1.Rn (SEQ ID NO:1) GCGATCGAGGCCCTCAGGGCTCTGCCCTCACCCCATCAGGGATGAGGACTGGGAATCG
 lsr1.Mm (SEQ ID NO:13) GCGATCTGGCCTTCCAGGGCTCTGCCCTCACCCCATCAGGGATGAGGACTGGGAATCG
 *
 lsr1.Hs (SEQ ID NO:7) CCACTCCCCCGGAGTCCCAGGGATGGGACCGAGGCCGCCAGGGAGCAGGCCAGGG
 lsr1.Rn (SEQ ID NO:1) CCACTCCCCACAGAGTCCCAGAACATGGGAGCAGGAACCCCTCAAGAACCAACCAAGGG
 lsr1.Mm (SEQ ID NO:13) CCACTCCCCCTCGGAGTCCCAGAACATGGGAGCAGGAACCCCTCAAGAACAGCCAAGGG
 *
 lsr1.Hs (SEQ ID NO:7) GGGCTGGCGGGCCAGGCAGGCCCGGGCCCGTCCGTGGACGCCCTGGACGCCCTACCC
 lsr1.Rn (SEQ ID NO:1) TGGTTGGGGTCTGGACGCCCTGGGCCCGCTCTGTGGATGCTCTAGATGATATCAACCG
 lsr1.Mm (SEQ ID NO:13) TGGTTGGGGTCTGGCGGCCCTGGGCCCGCTCTGTGGATGCTCTAGATGACATCAACCG

FIG. 7C

lsr1.Hs (SEQ ID NO:7) -----
lsr1.Rn (SEQ ID NO:1) AATCACAAAAAAAAAA
lsr1.Mm (SEQ ID NO:13) -----

FIG. 7E

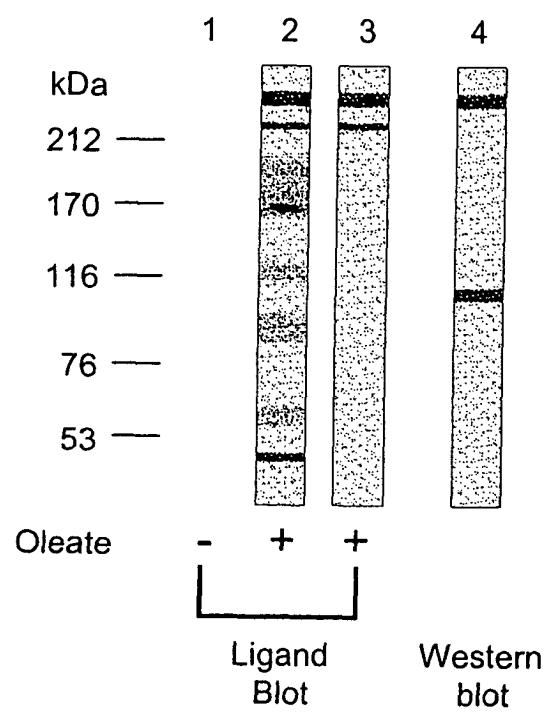


FIG. 8

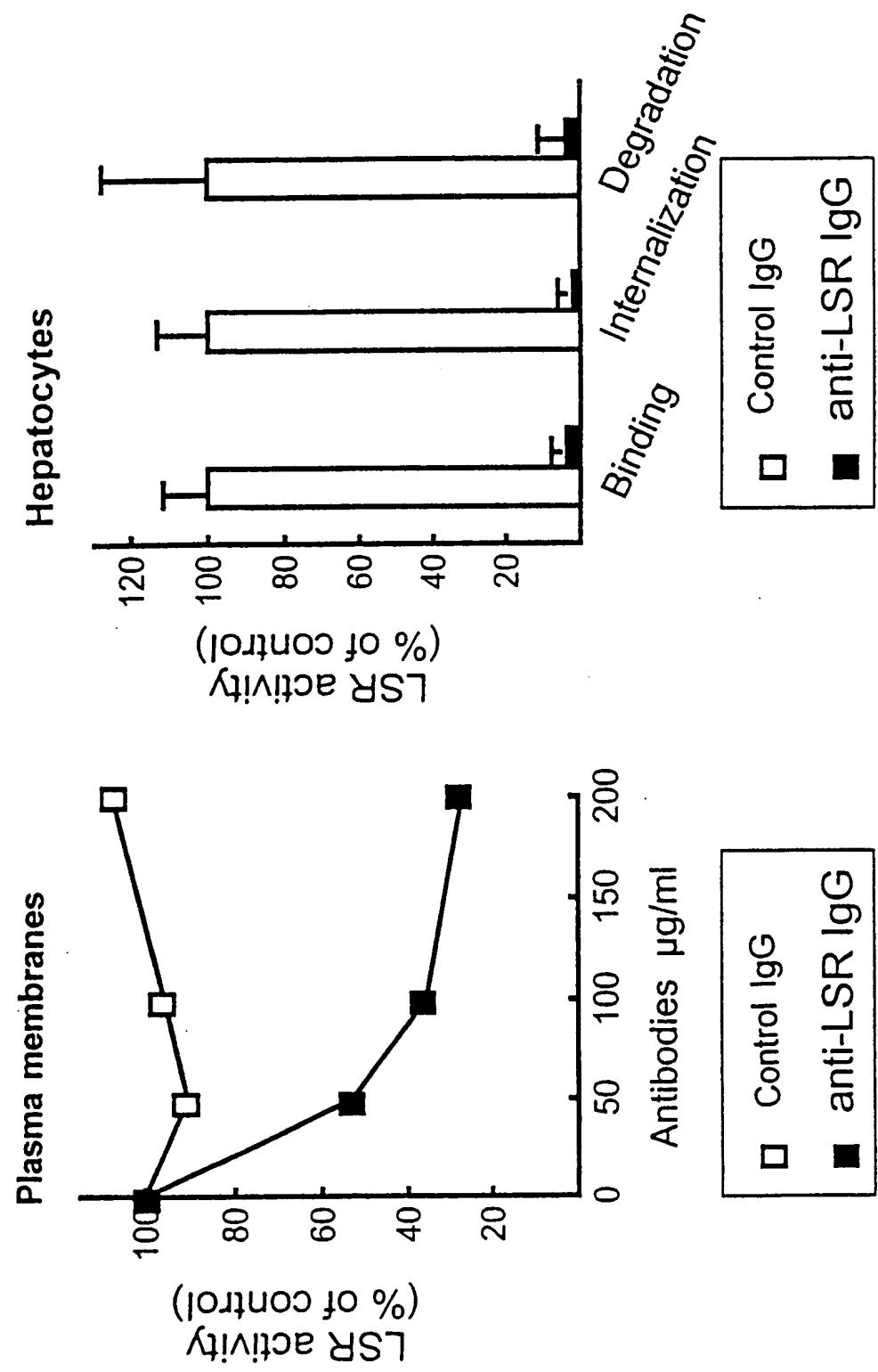


FIG. 9A

FIG. 9B

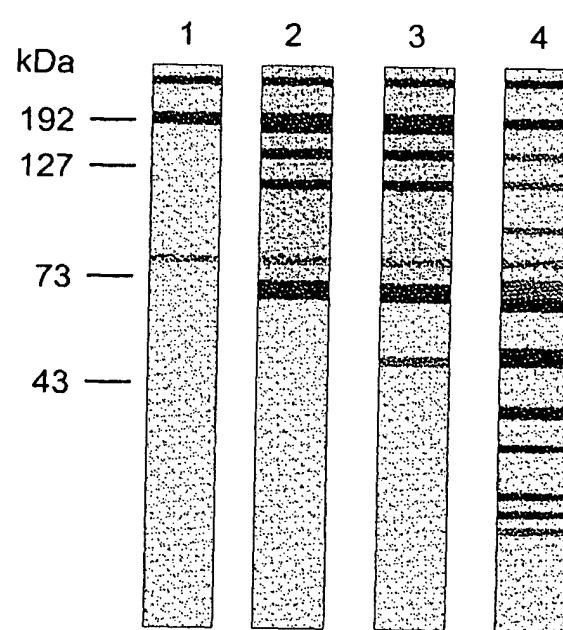


FIG. 10

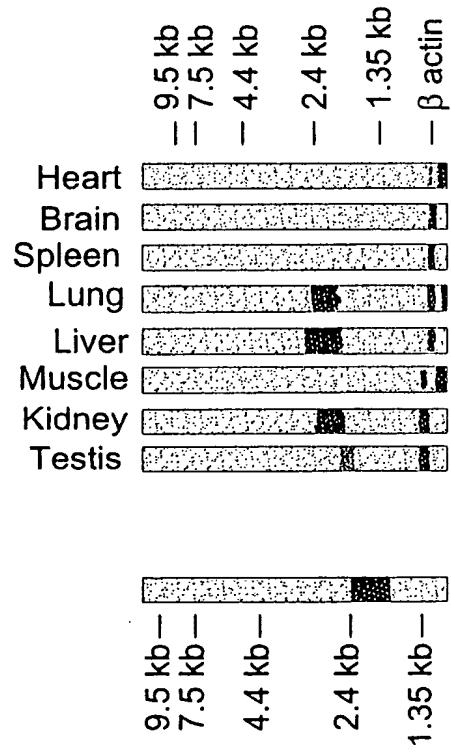
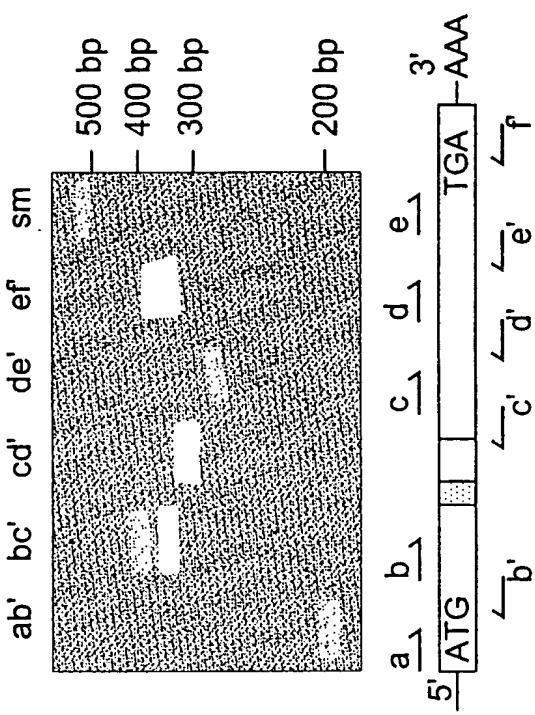


FIG. 11A

FIG. 11C

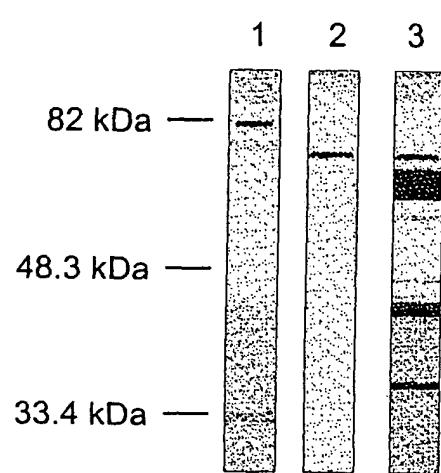


FIG. 12

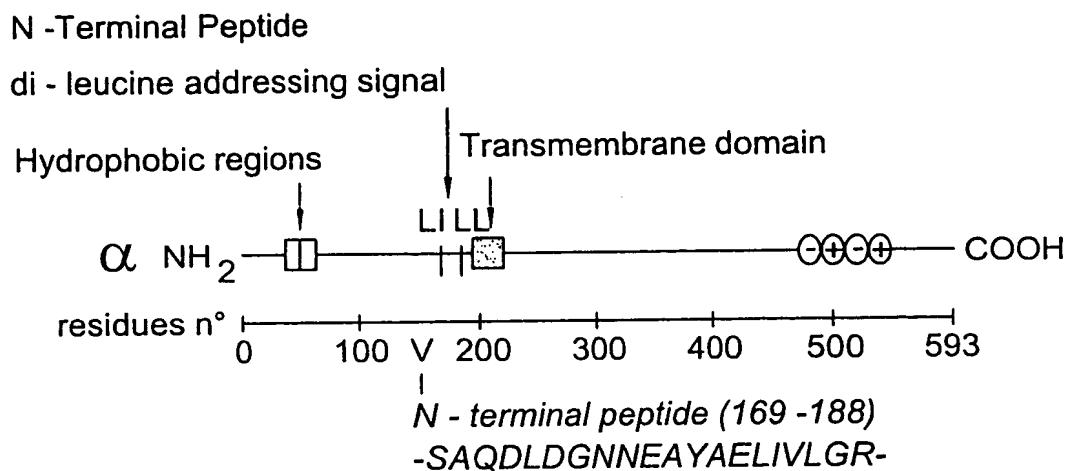


FIG. 13A

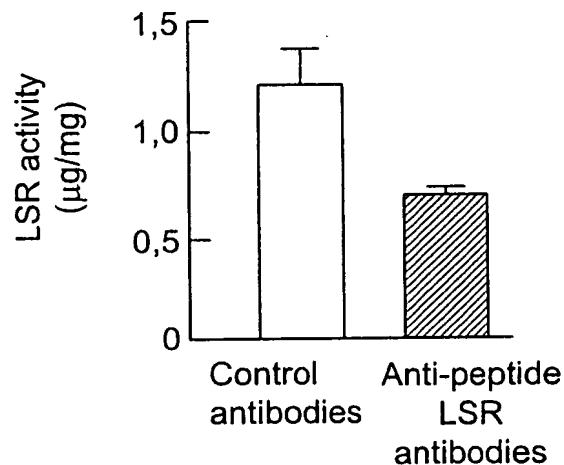


FIG. 13B

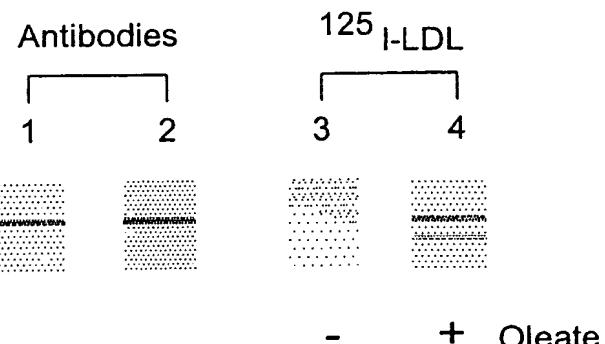


FIG. 13C

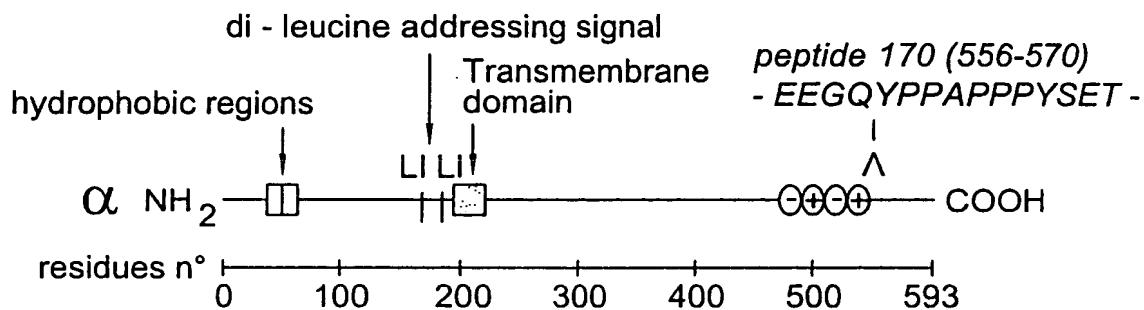


FIG. 14A Peptide 170

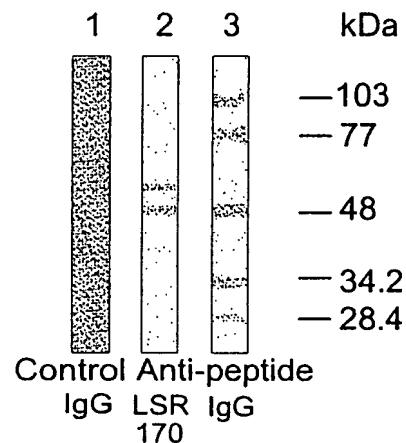


FIG. 14B Western

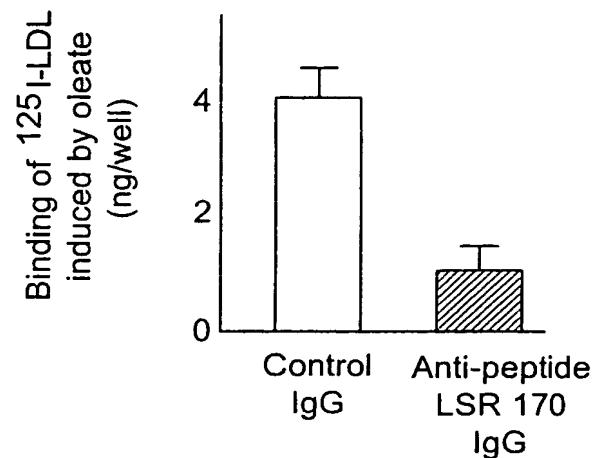


FIG. 14C Immunionhibition

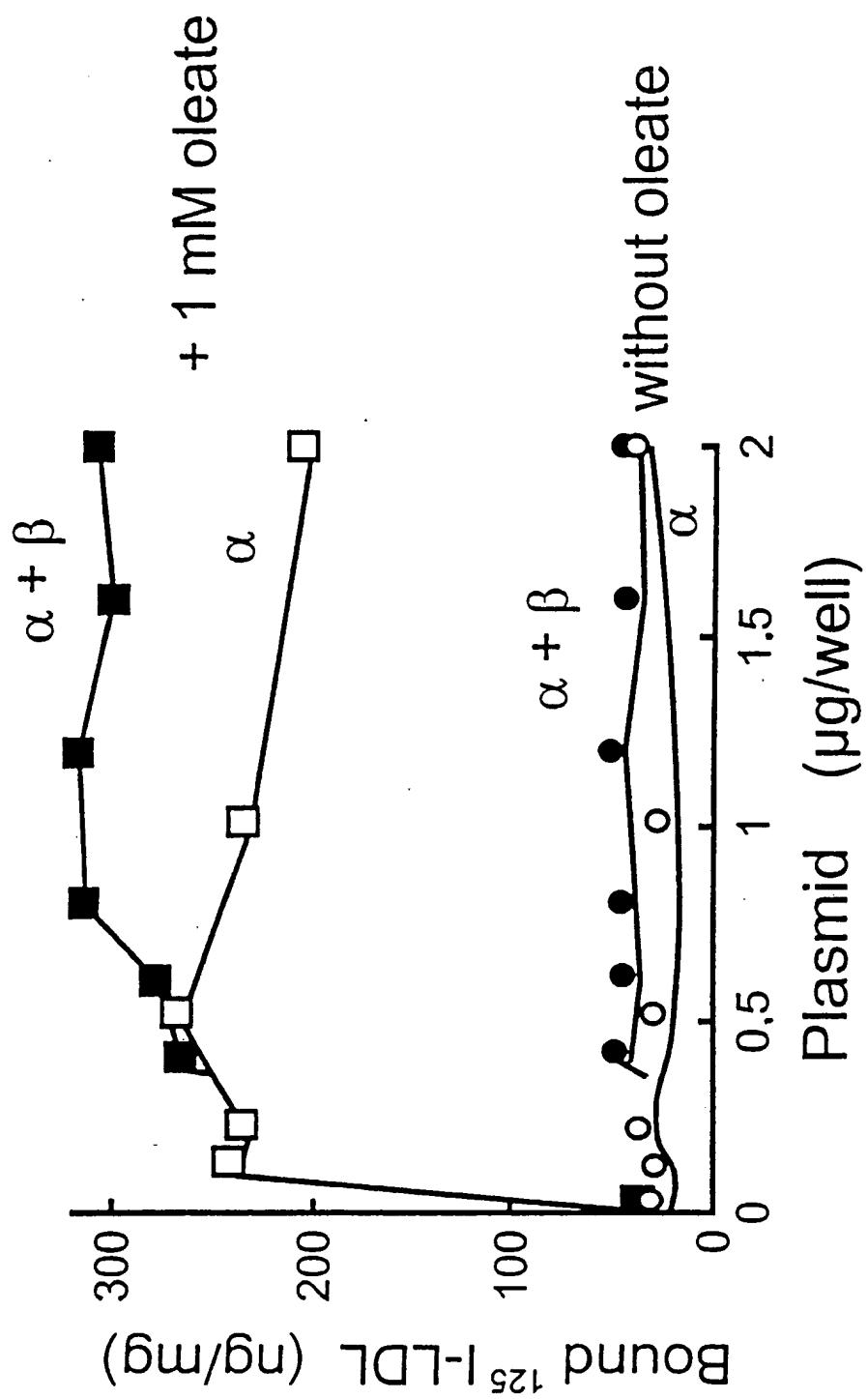


FIG. 15

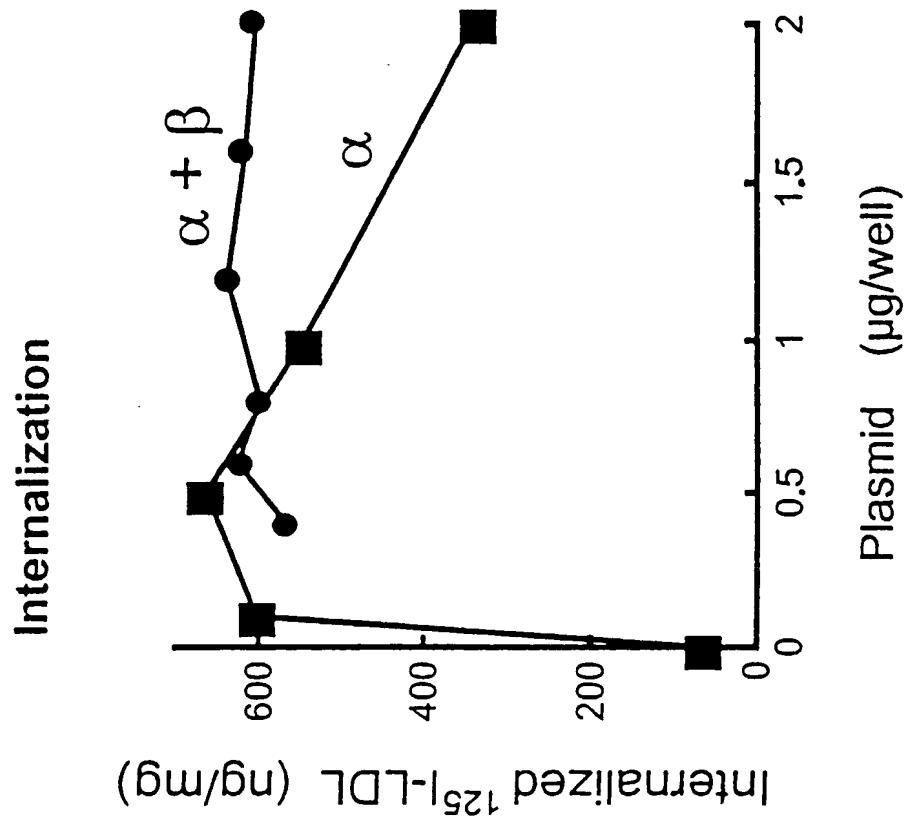
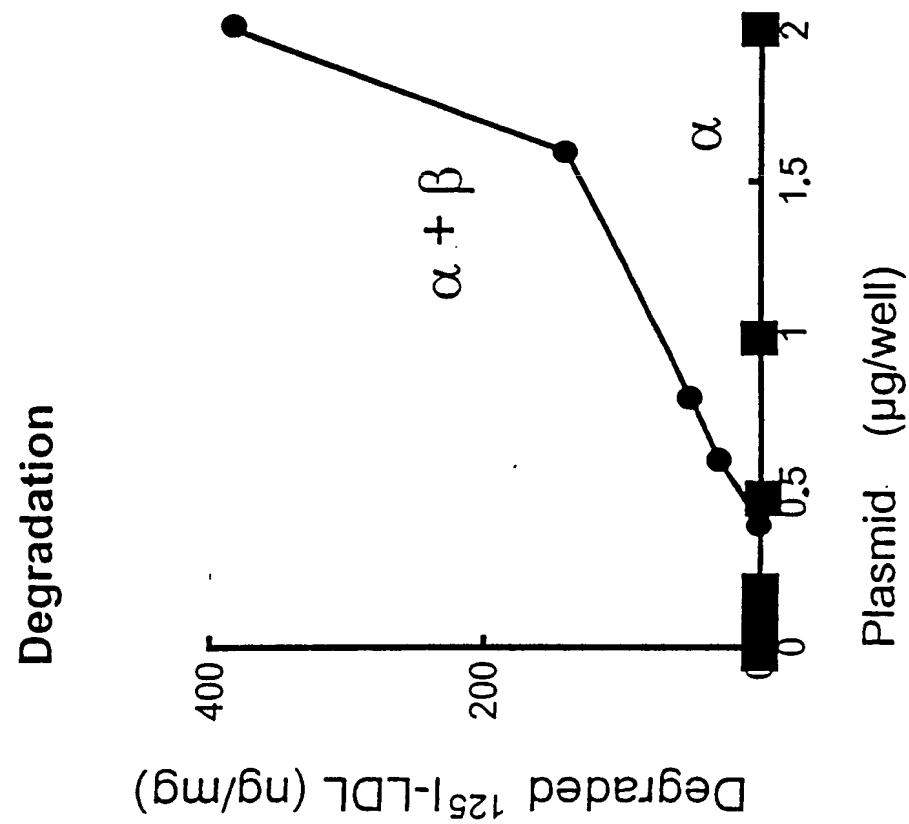
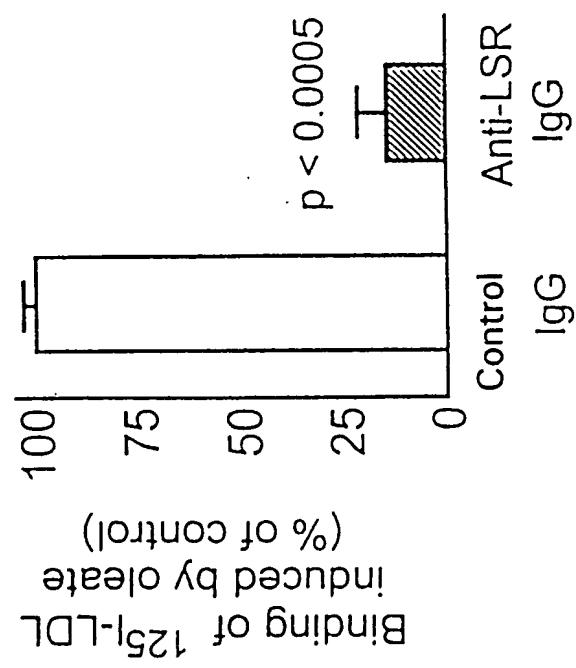


FIG. 16A

FIG. 16B

Immunoinhibition



Ligand specificity

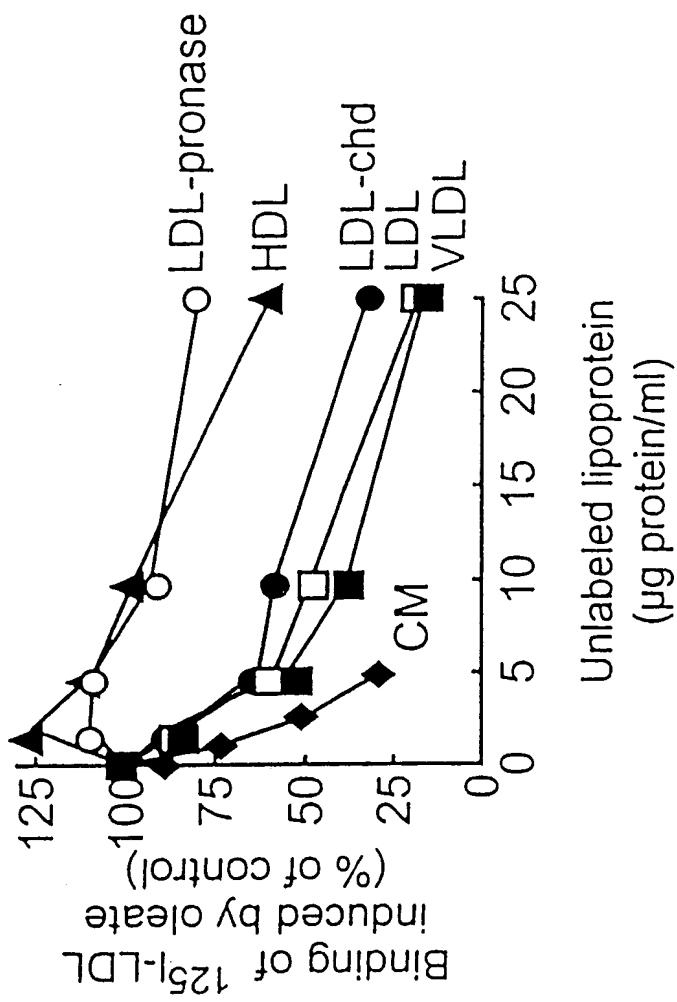
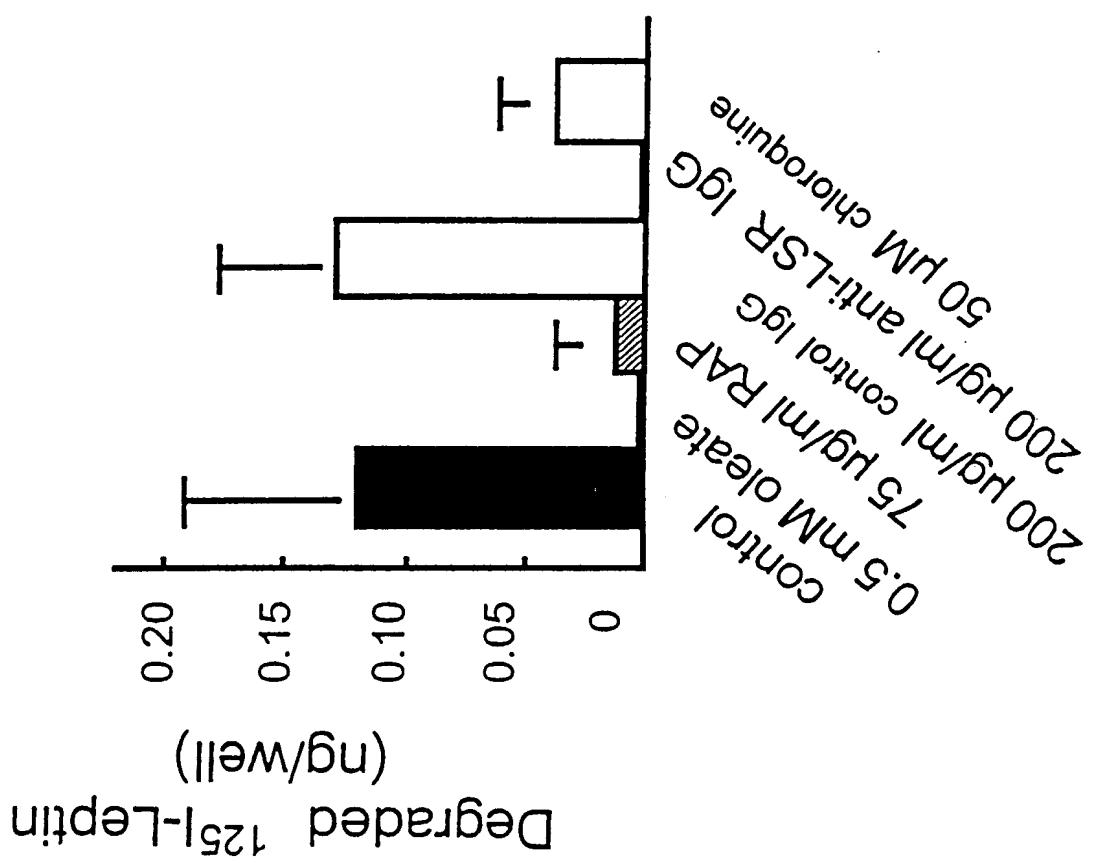


FIG. 17A

FIG. 17B

FIG. 18



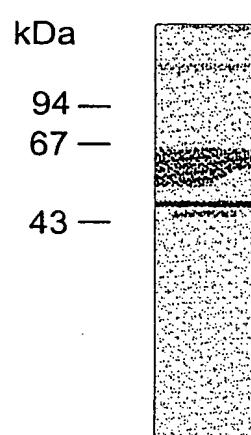


FIG. 19

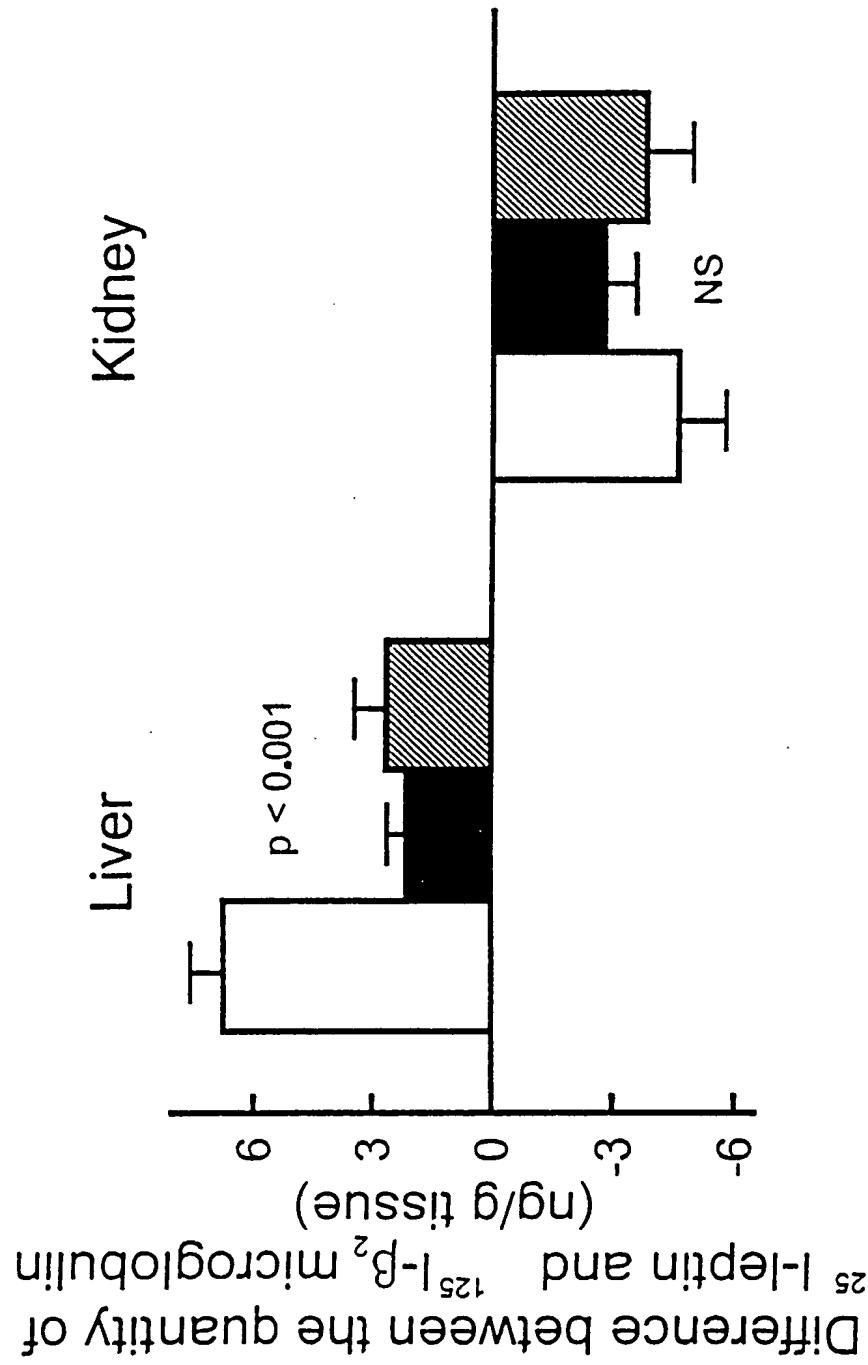
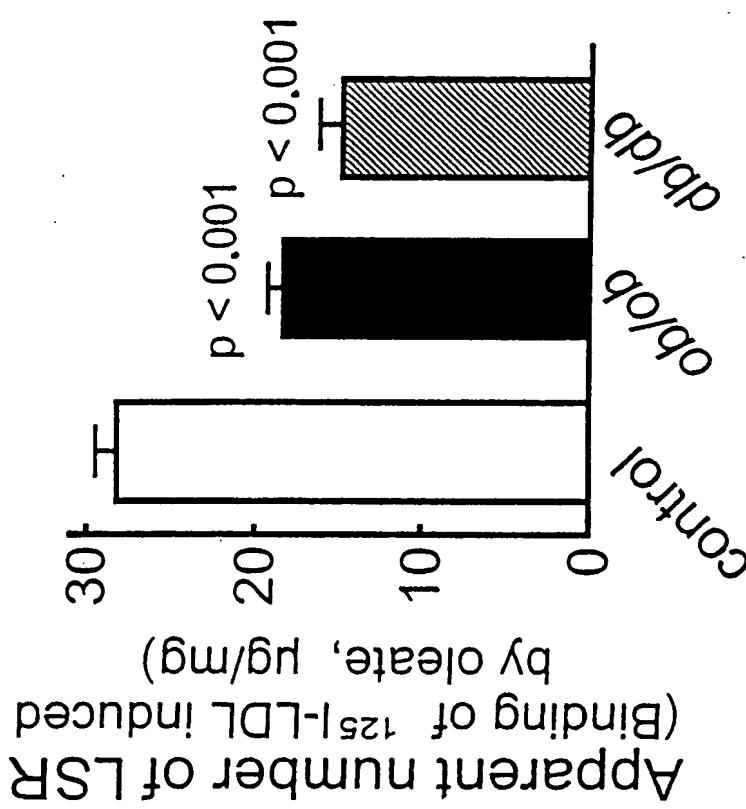
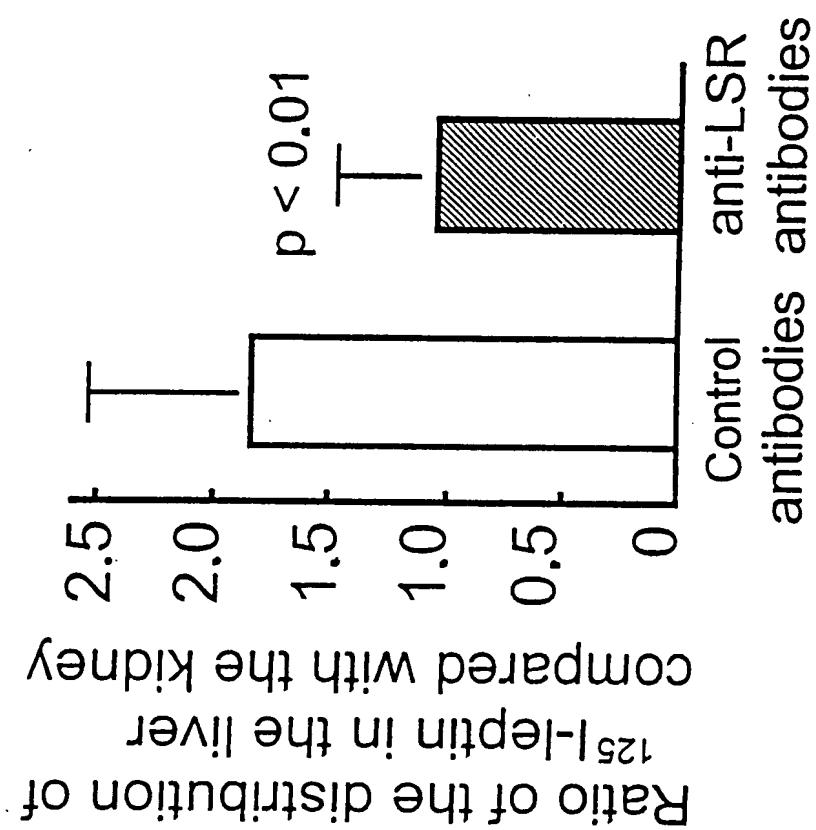


FIG. 21





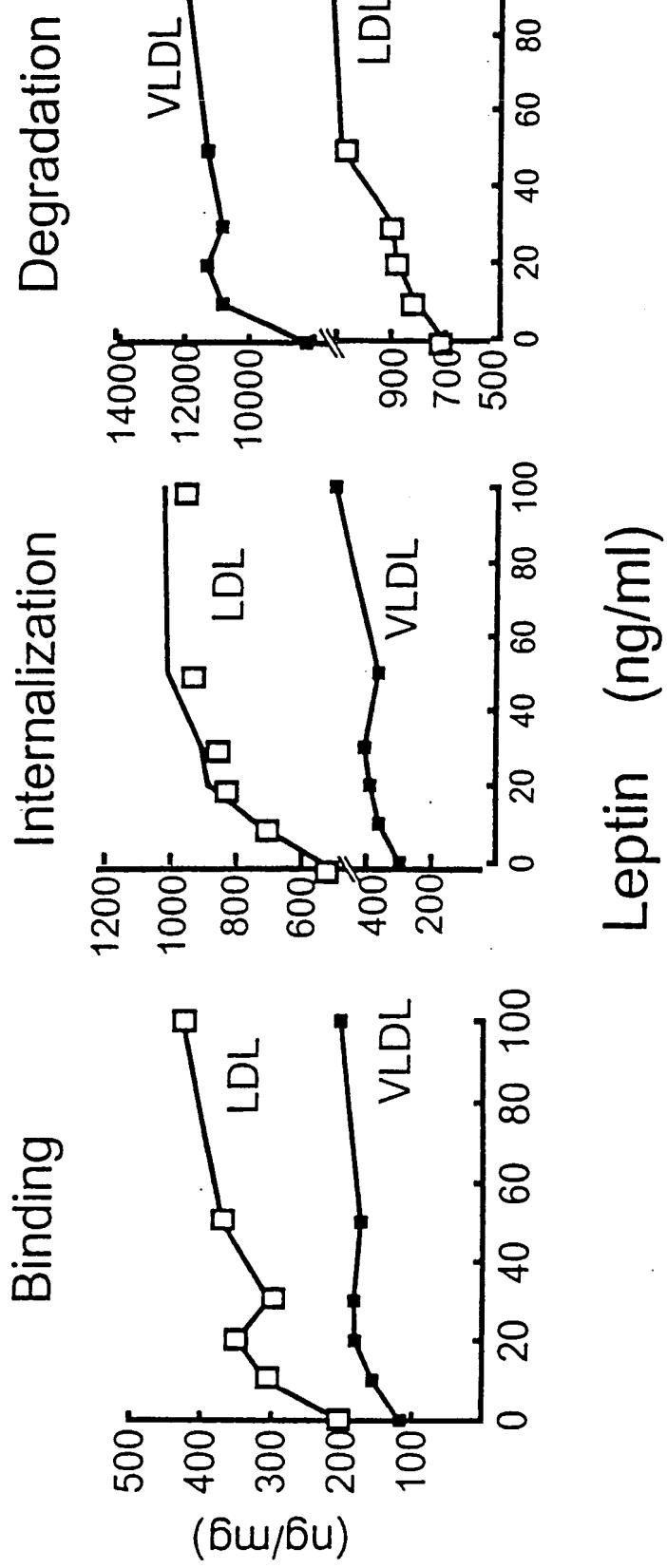


FIG. 23

FIG. 24A

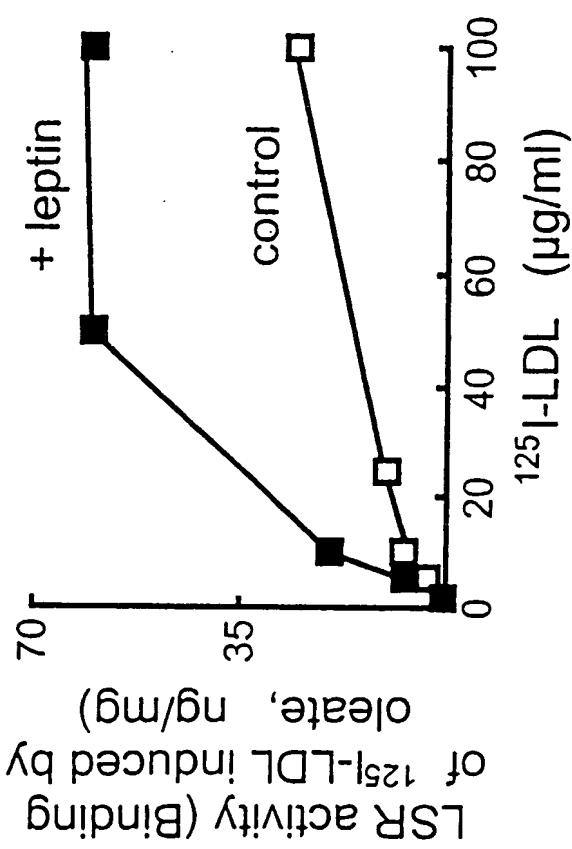
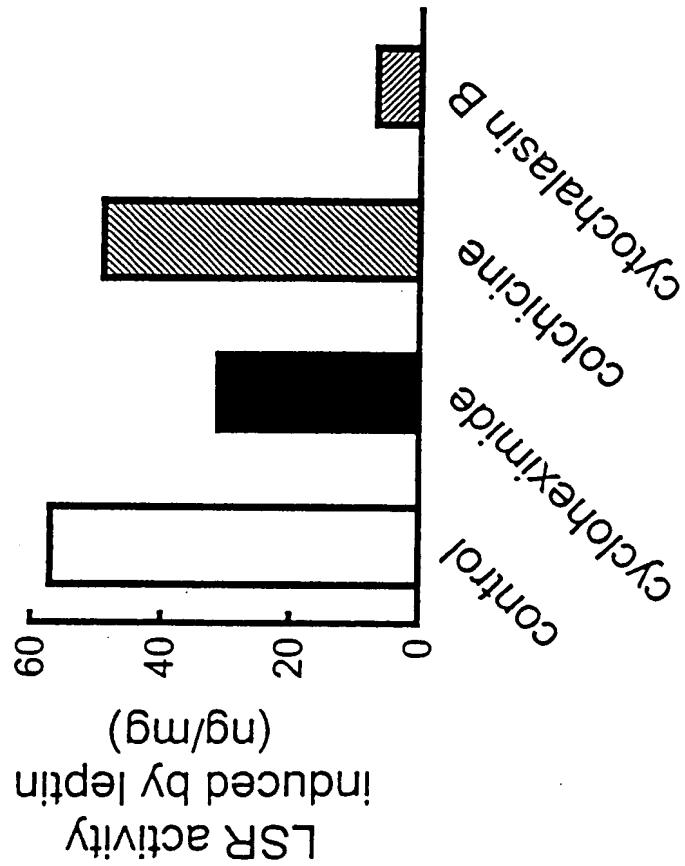


FIG. 24B



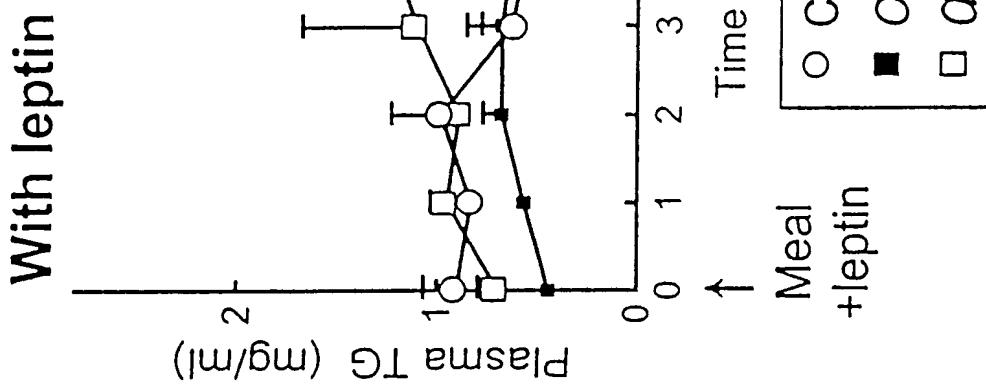
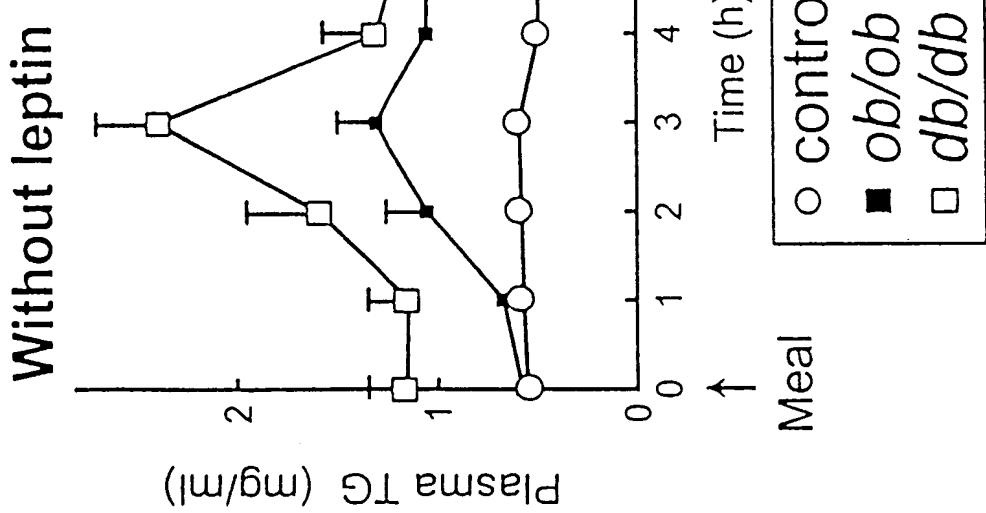


FIG. 25A

FIG. 25B

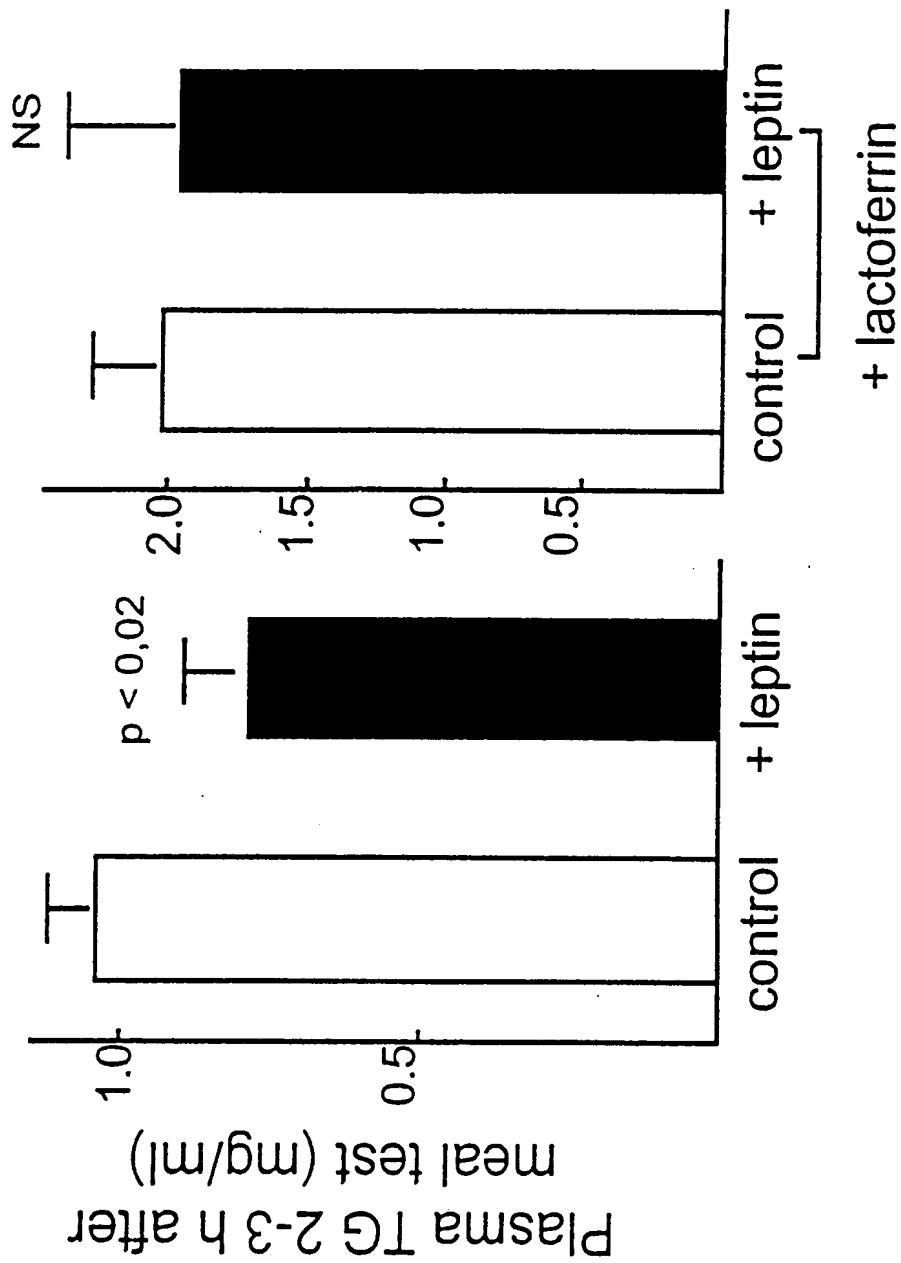


FIG. 26

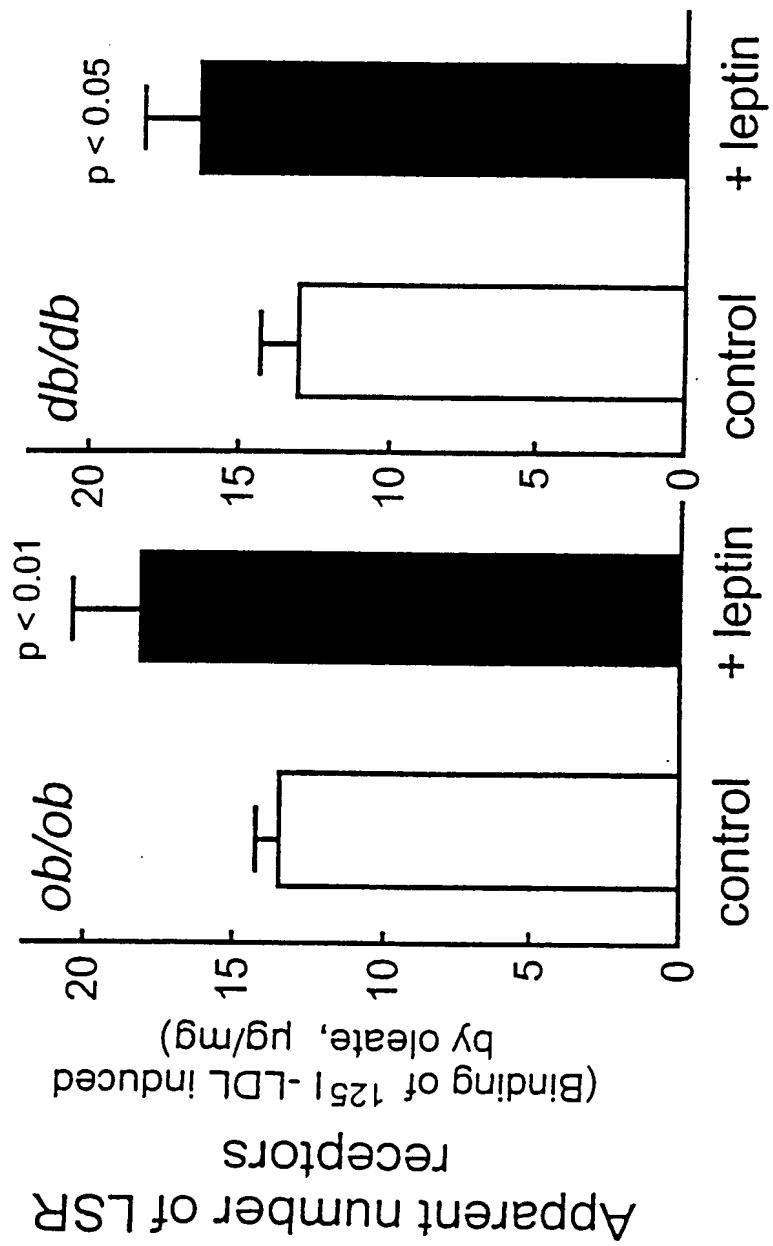


FIG. 27

FIG. 28A weight

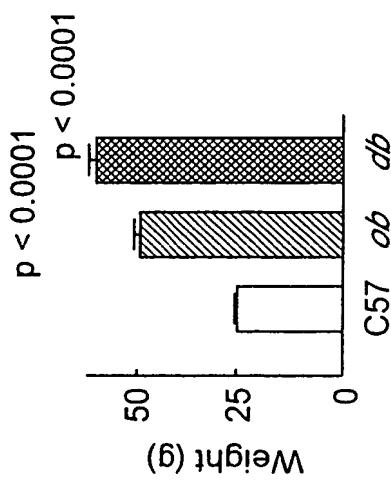


FIG. 28B Postprandial lipemic response

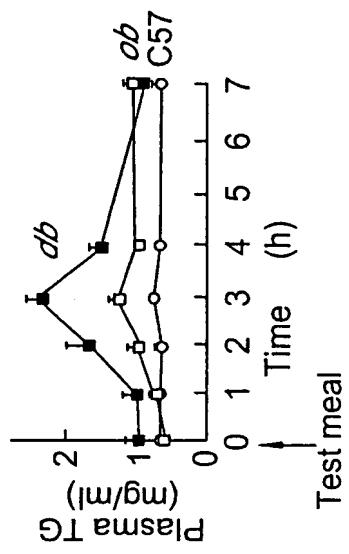


FIG. 28C LSR activity

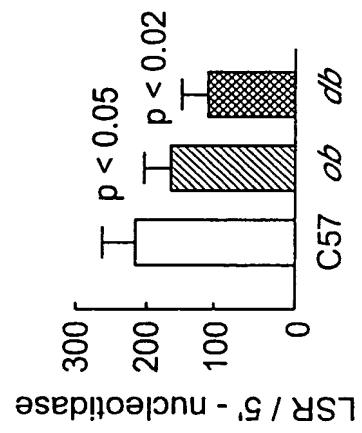


FIG. 28D Northern blot

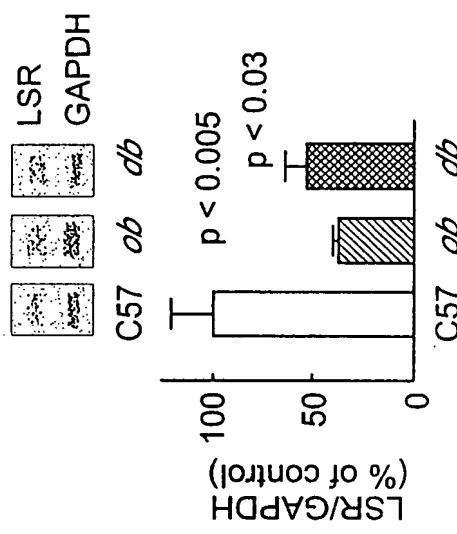


FIG. 29A weight

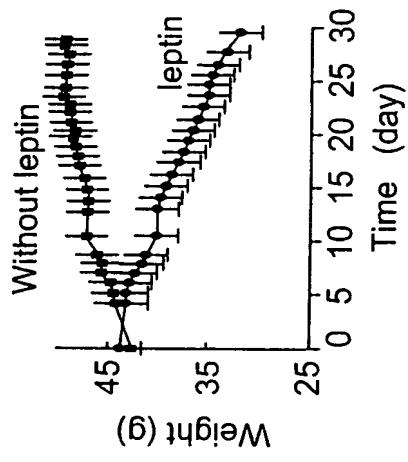


FIG. 29B Postprandial lipemic response

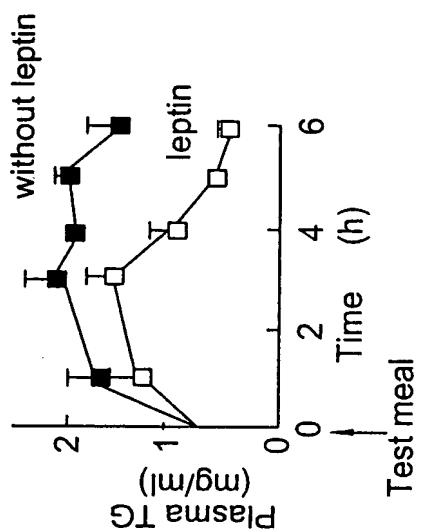


FIG. 29C LSR activity

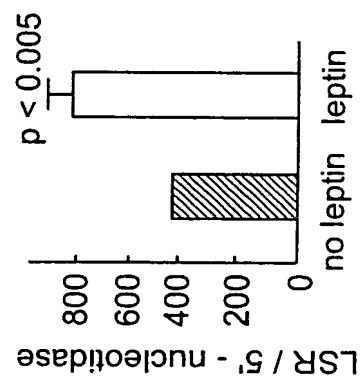
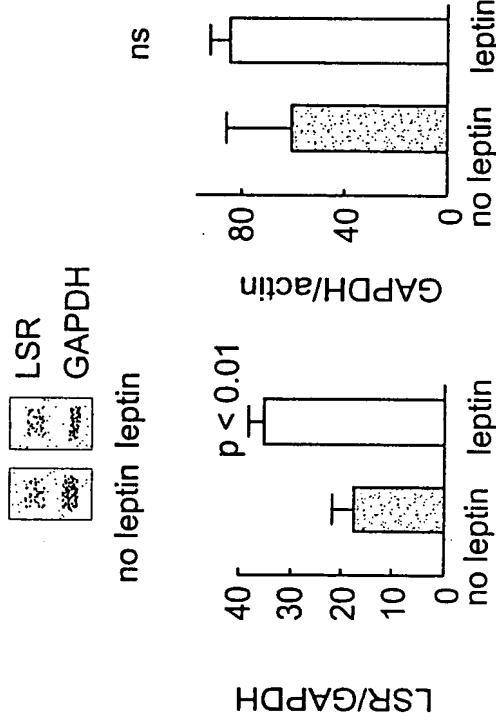


FIG. 29D

Northern blot



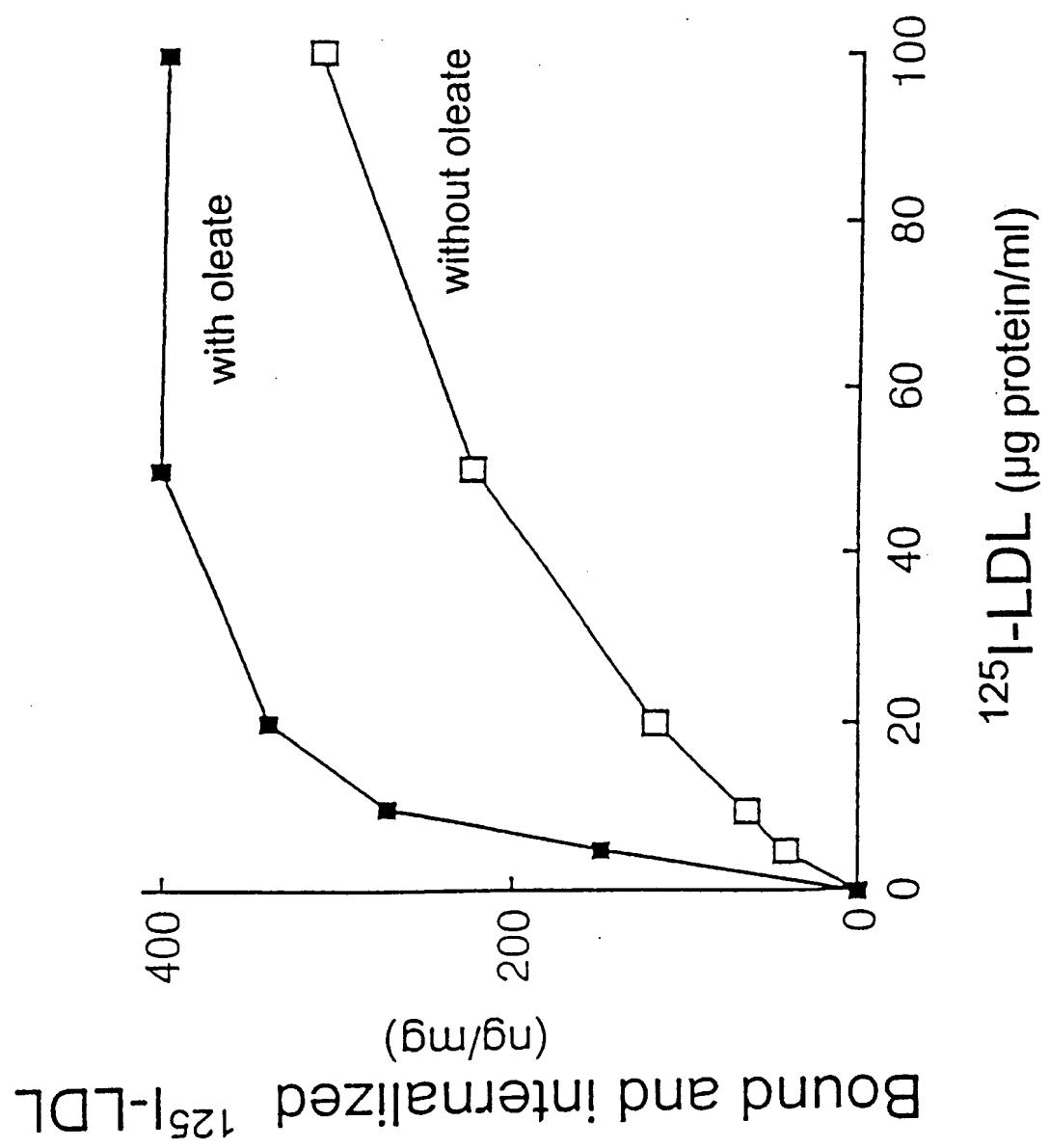


FIG. 30

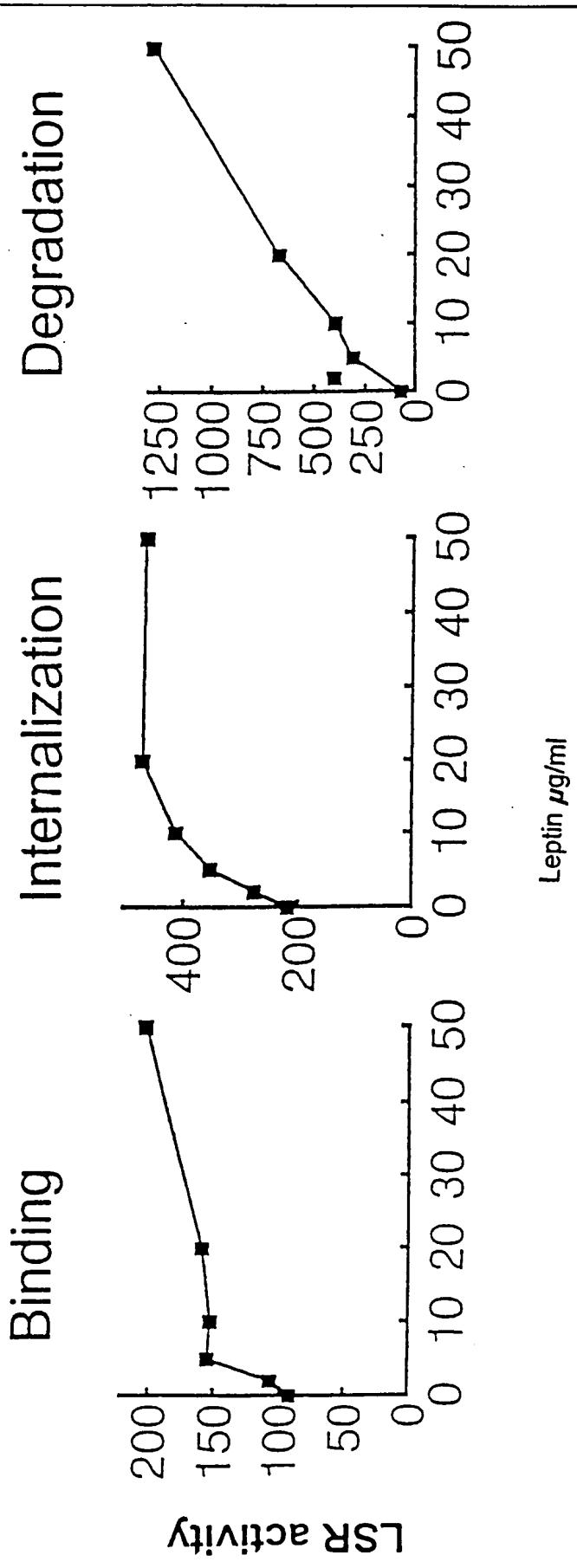


FIG. 31

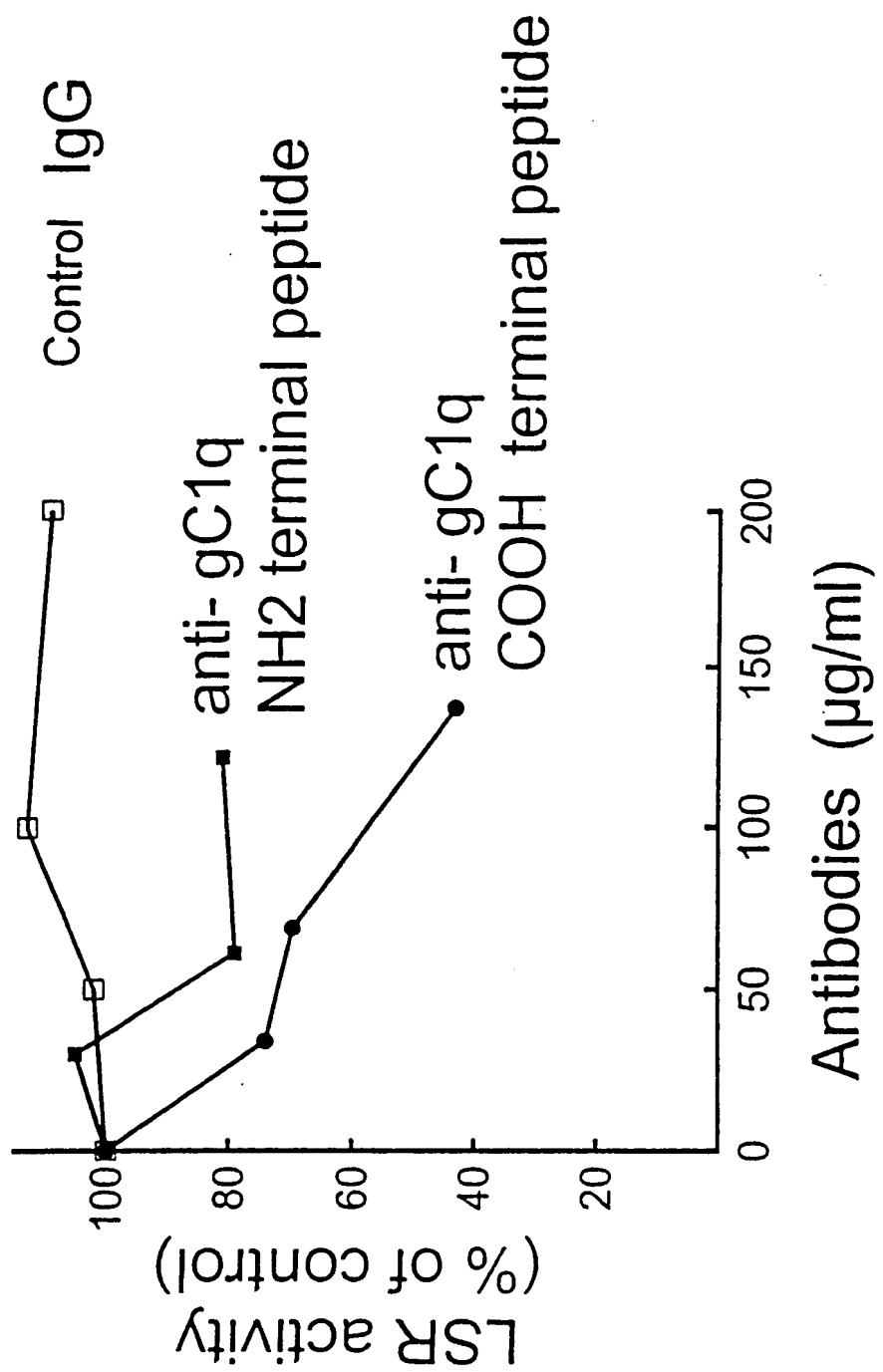


FIG. 32

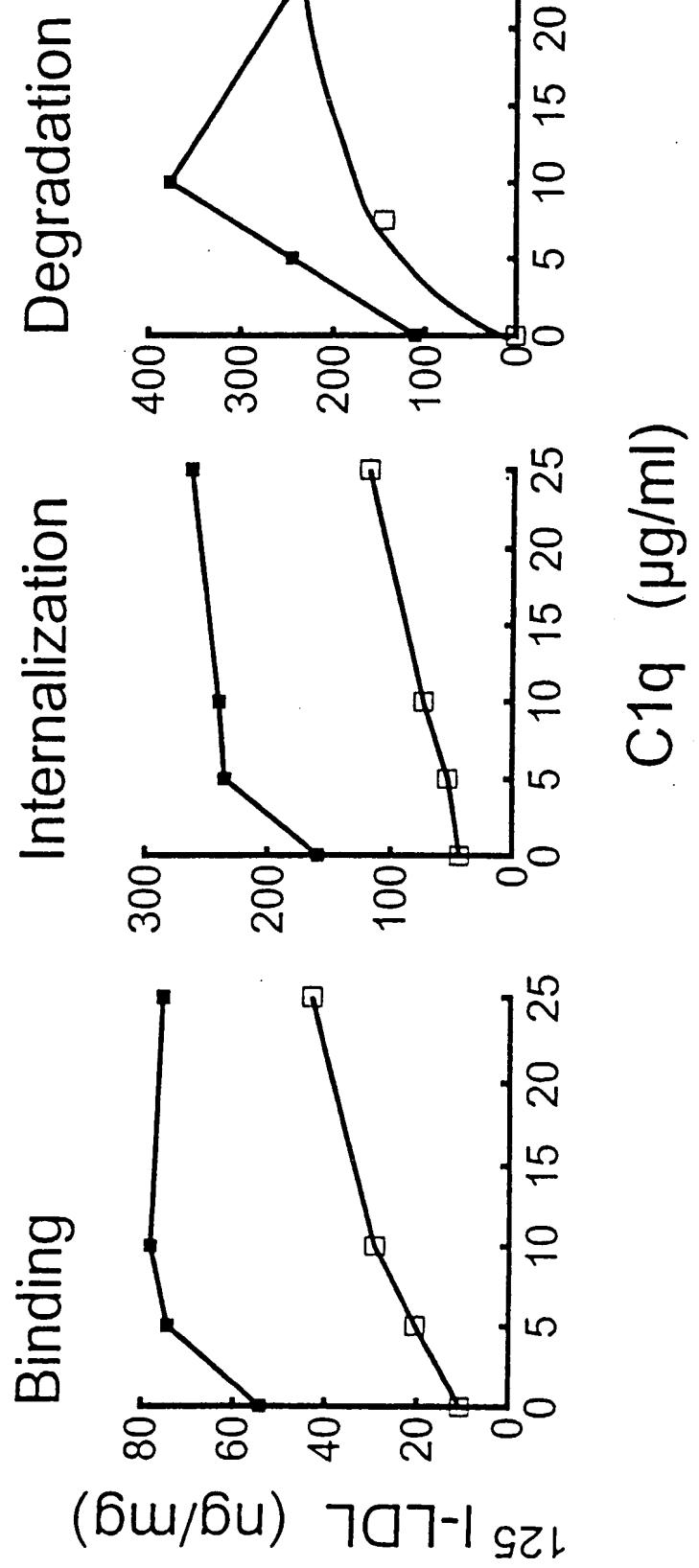
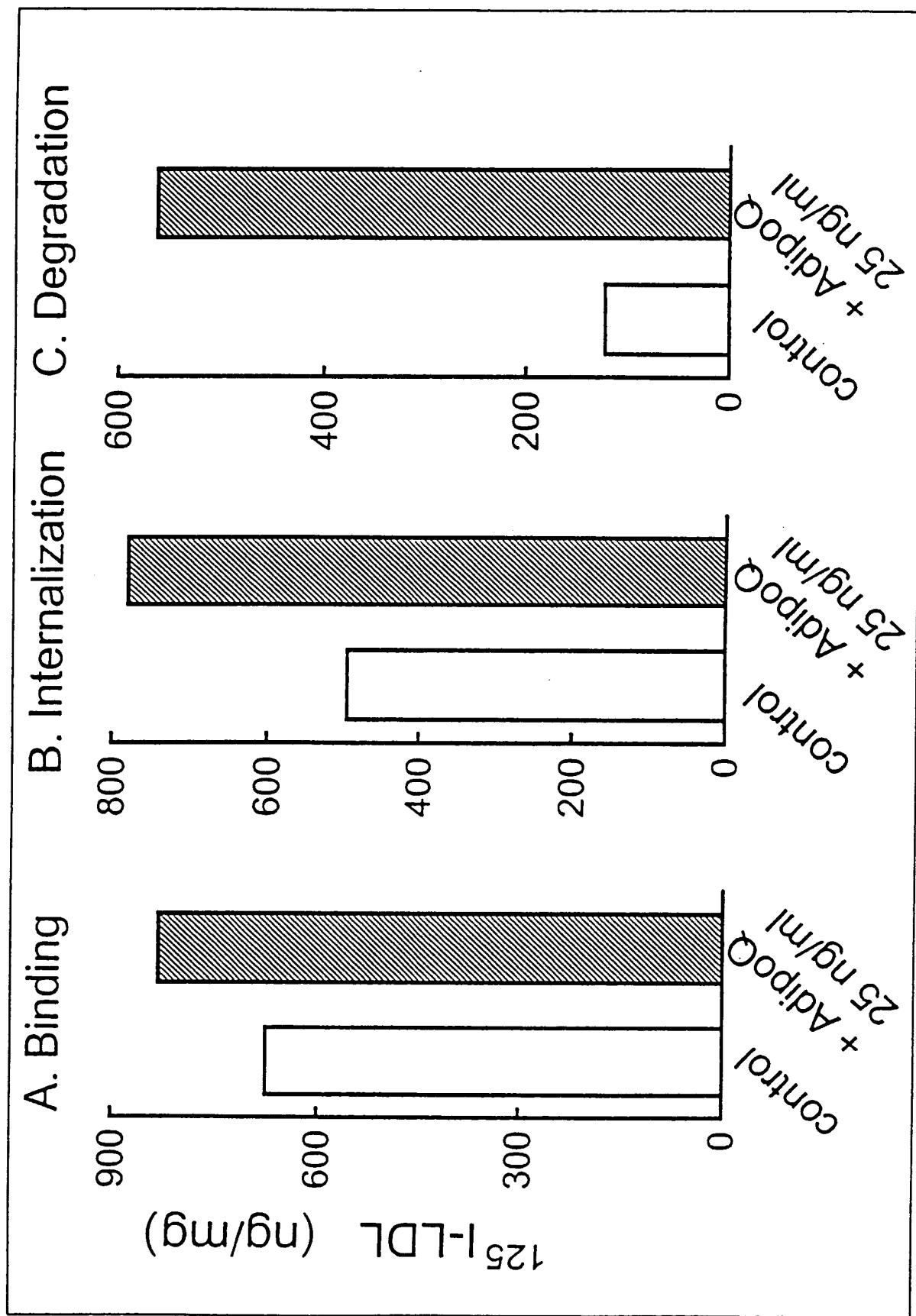
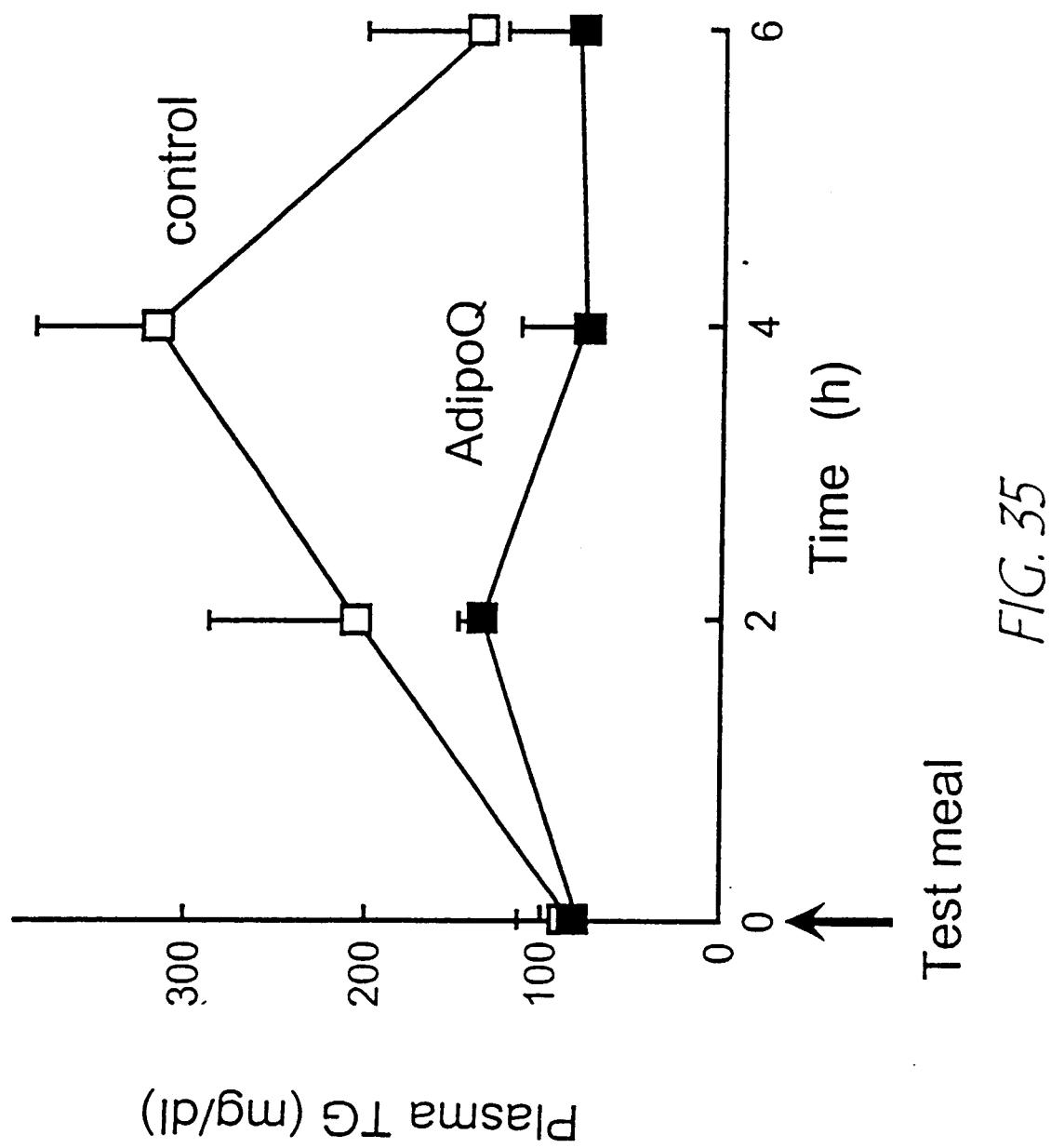


FIG. 33





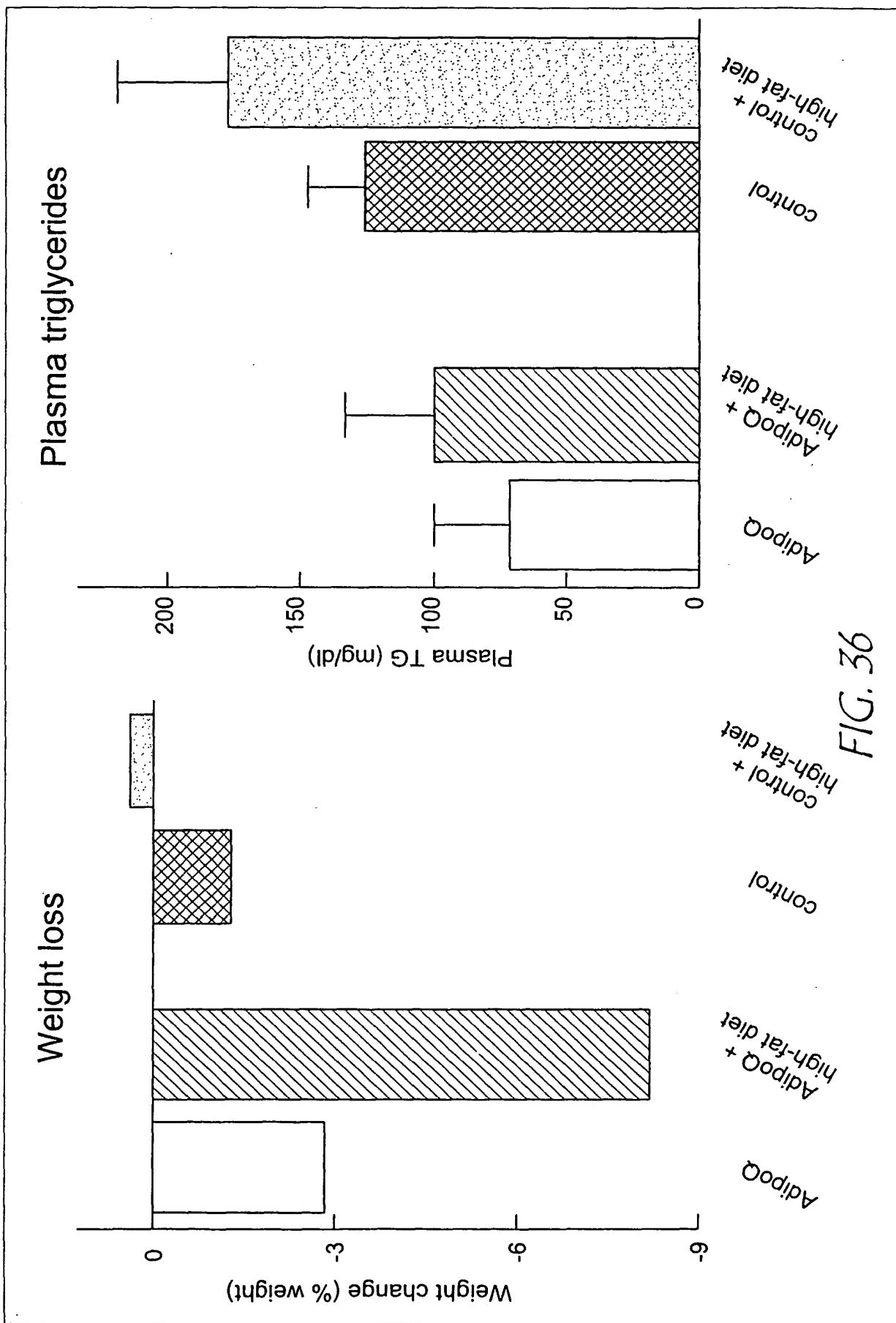


FIG. 37

